

New York State Department of Environmental Conservation  
50 Wolf Road, Albany, New York 12233

September 14, 1992

C

Mr. William E. Kochem, Jr.  
Supervisor, Plant Engineering  
Inland Fisher Guide Division  
General Motors Corp.  
1000 Town Line Road  
Syracuse, NY 13221

CA 92-09/14/92

Dear Mr. Kochem:

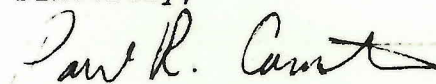
Re: Operations & Maintenance Inspection Report  
NYD002239440

Enclosed is a copy of the above-referenced report for the RCRA Groundwater Monitoring System around the surface impoundments.

One minor deficiency was noted. Wells MW-3S and MW-3D are shown incorrectly on the base map. MW-3D is to the south of MW-3S. Please submit a new map within 30 days of the date of this letter.

If you have any questions, please contact Ms. Luanne F. Whitbeck at (518) 457-9255.

Sincerely,



Paul R. Counterman, P.E.  
Director  
Bureau of Haz. Waste Facility Mgmt.  
Division of Haz. Substances Regulation

cc: w/enc. - L. Whitbeck  
P. Patel  
S. Eidt, Reg. 7  
M. Infurna, USEPA Reg. II  
J. Tomik, O'Brien & Gere

cc: w/o enc. - A. Bellina, USEPA Reg. II  
G. Meyer, USEPA Reg. II

**OPERATIONS & MAINTENANCE  
INSPECTION (O & M)**

**FISHER GUIDE DIVISION  
GENERAL MOTORS CORPORATION**

**I.D.# NYD002239440**

**July 1992**

***Prepared by:***

***Luanne F. Whitbeck, C.P.G.***

***Engineering Geology Section  
Division of Hazardous Substances Regulation  
New York State Department of Environmental Conservation***



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**BACKGROUND, INSPECTION  
AND CONCLUSIONS**

**SECTION 1**

## OBJECTIVE

The objective of this Operations and Maintenance Inspection was to:

- determine if the company is following the approved Groundwater Sampling and Analysis Plan,
- determine if the sampling equipment and the monitoring wells are maintained in good working order,
- collect groundwater elevation data for evaluation, and
- identify any violations in the operations and maintenance program.

## GENERAL INFORMATION

Inland Fisher Guide (IFG) Division of General Motors Corporation is located on Town Line Road, Syracuse, Onondaga County, New York. Fisher Guide manufactures plastic automotive body and trim components by injection molding, painting and assembly.

IFG had one surface impoundment (#1) that collected treated waste water from the copper/nickel and chrome plating operations, and treated waste water from various painting and plastics forming operations. The second impoundment (#2) was used to capture free oil from collected storm water runoff. The impoundments were physically closed in 1989. Impoundment #2 was backfilled with clean fill. Impoundment #1 was backfilled with material containing low levels of PCBs from the Meadowbrook Avenue site. IFG, will, therefore, need a Post-Closure Permit with compliance groundwater monitoring.

## HYDROGEOLOGY

Based on test boring data reviewed, the uppermost aquifer at IFG consists of fine-grained silts, clays and fine sand lacustrine deposits overlying glacial till. The lacustrine deposits are up to 35 feet thick. The glacial till is a dense reddish-brown clay silt with sand and imbedded gravel fragments. It is exposed in the stream bed of Ley Creek and dips southward toward the site. The bedrock in this area is the Vernon Shale.

Water level measurements in both the shallow wells (screened from 9 to 17 feet) and the deeper wells (screened from 28 to 36 feet) indicate that groundwater flow is to the northeast near Surface Impoundment #1, trending north near Surface Impoundment #2 (see Figures 2 and 3, Appendix B).

#### **GROUNDWATER MONITORING SYSTEM**

Five two-well clusters were installed in September of 1988 in the area of the surface impoundments. Clusters MW-1S, MW-1D, MW-2S and MW-2D were installed upgradient of the surface impoundments. MW-3S, MW-3D, MW-4S, MW-4D, MW-5S and MW-5D were installed downgradient of the surface impoundments (see Figure 1). These wells provide for immediate detection of contaminants in the groundwater from area of the surface impoundments.

#### **GROUNDWATER MONITORING PROGRAM**

The interim status Alternate Monitoring System Program consists of quarterly monitoring for pH, specific conductivity, temperature, volatile organics, cyanide, PCBs and total metals. Carbon disulfide was detected in the Appendix 23 sampling in September of 1991 and was added to the quarterly monitoring program. Filtered metals and laboratory pH and specific conductivity are also analyzed, but not required.

#### **FIELD OBSERVATIONS**

NYSDEC staff Luanne Whitbeck, Engineering Geologist 2, CPG, from the Central Office, performed an oversight inspection on June 25, 1992. Peter Loretto from O'Brien and Gere, consultant for IFG, purged and sampled wells MW-2D, MW-3S, MW-3D, MW-4S and MW-4D on June 25th for the above-referenced parameters. Monitoring wells MW-1S, MW-1D, MW-2S, MW-5S and MW-5D were purged and sampled on June 26th. Static water levels were measured prior to purging and again prior to sampling. Field data is presented in Table 1, Appendix A. The O & M Worksheets are presented in Appendix C, and the photographs are presented in Appendix D.



## CONCLUSIONS

The only deficiency noted was that MW-3S and MW-3D are shown incorrectly on the base map and the groundwater flow maps. MW-3D, as measured in the field, is to the south of MW-3S. This drafting error needs to be corrected.

The sampler would be able to complete the purging and sampling of all ten wells in one day if IFG purchased dedicated bailers. The money saved by paying for less consulting staff time (at least four hours per event), as well as the money saved because no equipment blank would be needed, would probably cover the cost of the equipment in two sampling events. IFG may wish to consider purchasing bottom-fill teflon bailers rather than bottom-fill stainless steel bailers. The teflon bailers are lighter in weight and make it easier to obtain a volatile sample without disturbing the water column. It is also easier to observe LNAPL/DNAPL in the sample if the appropriate brand of teflon bailer is used.

IFG corrected the following deficiencies noted in the 1992 Comprehensive Monitoring Evaluation:

1. Pre-sample water levels, as well as prepurge water levels are measured during each sampling event.
2. Groundwater samples are collected as soon as the wells have sufficiently recharged. The purging and sampling for each well occurs the same day.
3. Samples were collected for cyanide.
4. The wells were checked for LNAPL and DNAPL prior to purging. The appropriate containers were available for sampling of the NAPL should it have been found.
5. The wells have been painted, labeled, and had the protective aprons repaired. The total well depths are in agreement with those depths noted in the Groundwater Monitoring Report. During discussions with Peter Loretto of O'Brien and Gere, typographical errors were found in the screened intervals for wells MW-4S, MW-4D and MW-5D. A corrected table was provided to the Department.

6. Wells MW-1S, MW-3S and MW-3D have been repaired and resurveyed and are back in service after being damaged during closure.
7. IFG keeps all required records and documents on file at the facility.
8. IFG's consultant follows their approved sampling and analysis plan. The sampler was experienced and was familiar with the monitoring system.
9. The monitoring wells and the sampling equipment were in working order and appear to be maintained. The sampler was knowledgeable regarding the maintenance and cleaning of the equipment. Based on these observations, the samples collected from this system should be representative of groundwater associated with the surface impoundment area.
10. Groundwater elevation data was collected and potentiometric contour maps developed from this data (see Figures 2 and 3). Based on this information, IFG's decisions as to the number and location of monitoring wells in the network for detection monitoring appear to be appropriate. Monitoring well MW-3D did have a water level in September of 1991 that was not consistent with the previous data and did appear to change the deeper groundwater flow direction. IFG has been instructed to notify the Department if any low groundwater elevations are observed again. Further investigation will then be necessary (additional water level readings). If this phenomena is repeated, additional downgradient wells may need to be installed.

## **APPENDICES**

### **SECTION 2**

**TABLES**

**APPENDIX A**



**TABLE 1**  
**GMC FISHER GUIDE**  
**JUNE 26 AND 27, 1992**

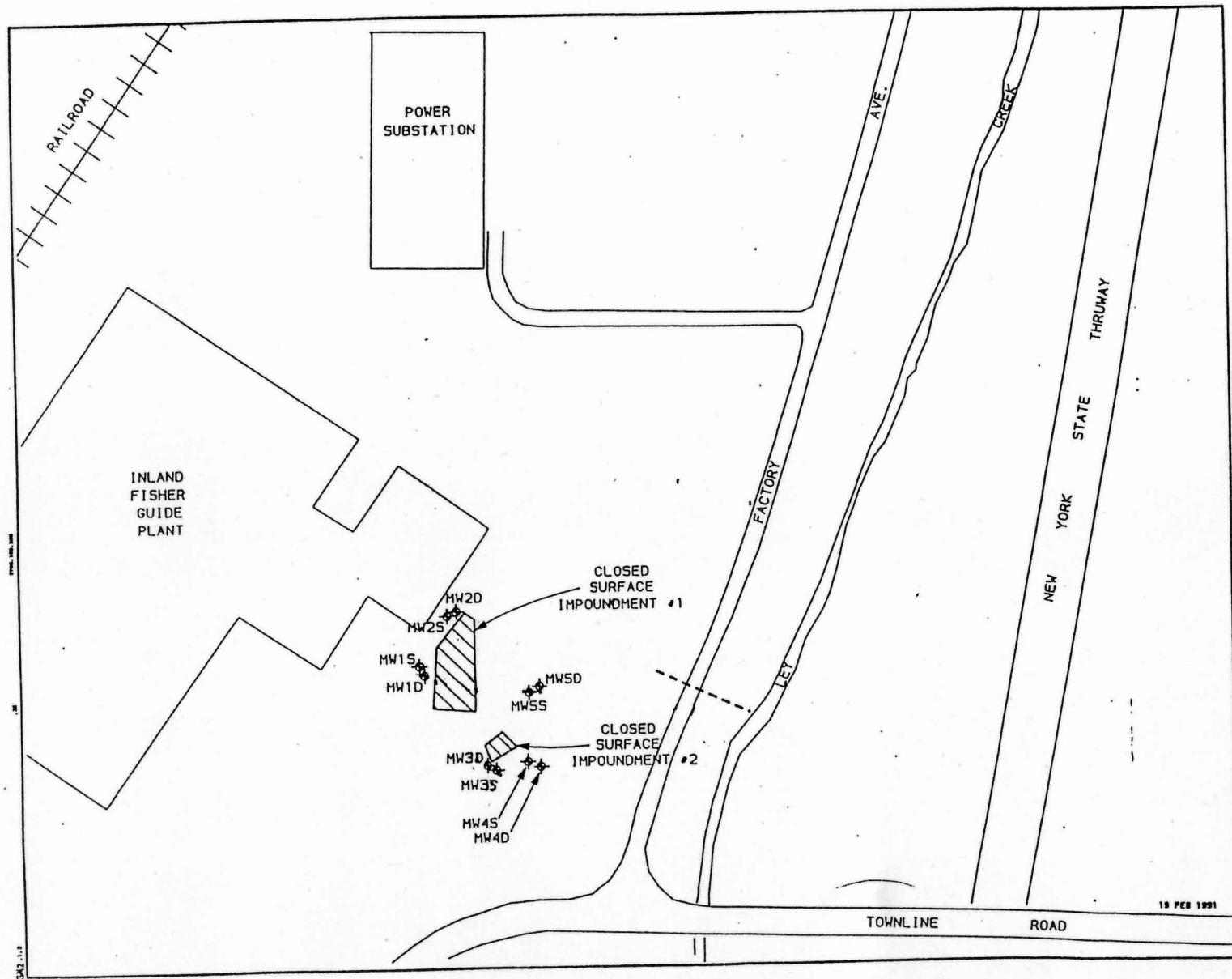
WELL	TOP OF CASING ELEV.*	PREPURGE DEPTH TO WATER (FT.)	GROUNDWATER ELEVATION*	TOTAL WELL DEPTH FROM TOC (FT.)	pH	SPECIFIC CONDUCTIVITY $\mu$ MOS	TEMPERATURE °F
1S	384.00	6.58	377.42	13.78	7.60	800	64.8
1D	383.77	7.81	375.96	29.31	7.75	755	64.5
2S	386.95	7.62	379.33	15.56	6.50	1826	66.5
2D	386.19	9.79	376.40	30.39	6.10	976	59.3
3S	383.70	7.68	376.02	16.50	6.18	1643	63.3
3D	383.61	8.26	375.35	32.79	7.50	997	63.5
4S	386.16	10.05	376.11	17.23	6.03	1310	64.2
4D	385.60	10.38	375.22	37.47	7.30	872	67.4
5S	383.81	8.75	375.06	17.32	6.50	893	65.3
5D	383.02	8.05	374.97	37.00	6.30	1213	61.3

\* Feet above sea level

**FIGURES**

**APPENDIX B**

012



GENERAL MOTORS CORPORATION  
INLAND FISHER GUIDE DIVISIO  
SYRACUSE, NEW YORK

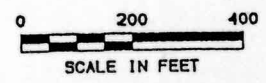
SITE MAP



LEGEND

- MONITORING WELL
- ◊ CLOSED SURFACE IMPOUNDMENT
- - - - - OUTFALL

Site Map

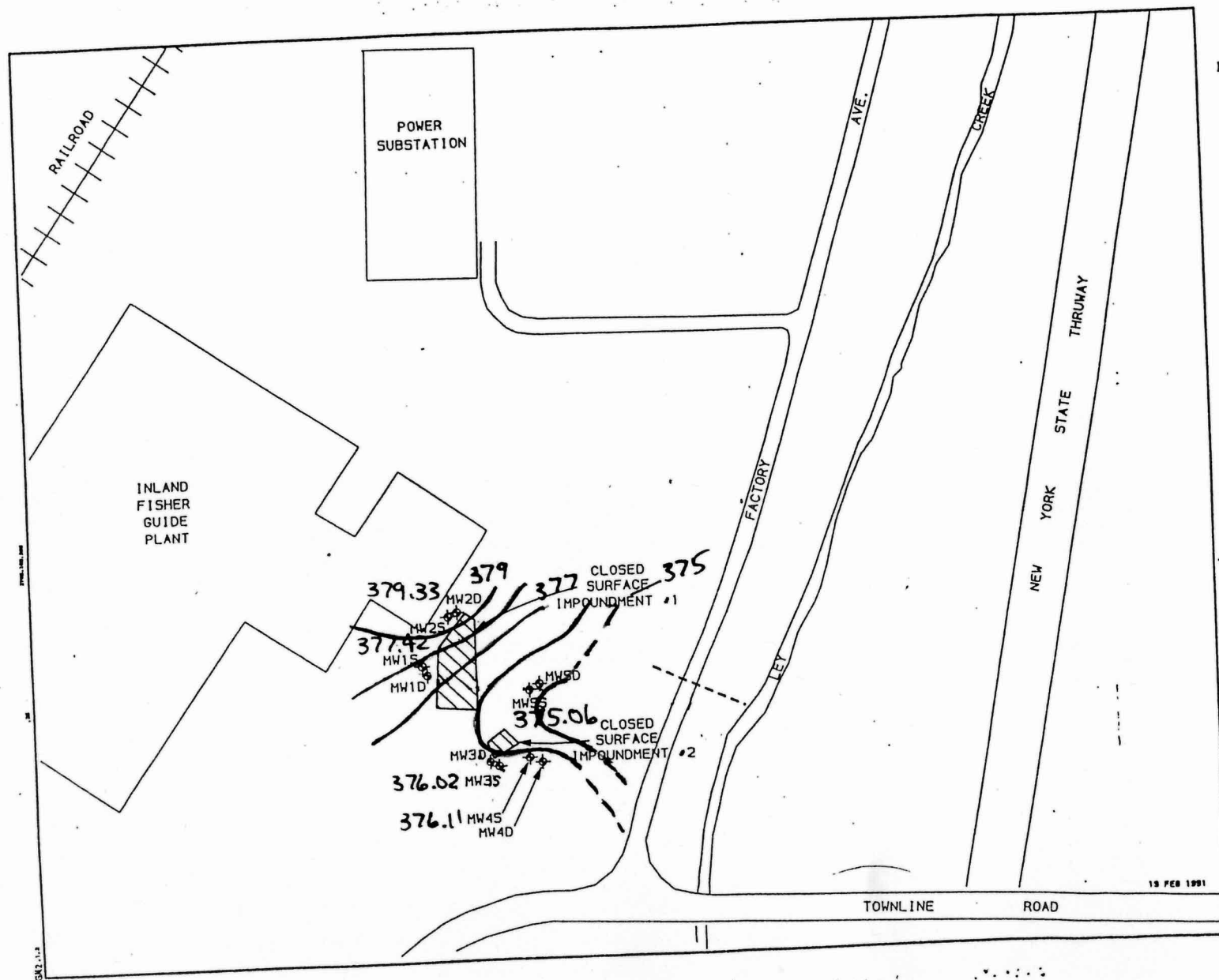


**O'BRIEN & GERE**  
ENGINEERS, INC.  
SYRACUSE, NEW YORK

19 FEB 1991

FIGURE 1

010



GENERAL MOTORS CORPORATION  
INLAND FISHER GUIDE DIVISION  
SYRACUSE, NEW YORK

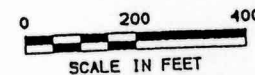
SITE MAP



LEGEND

- MONITORING WELL
- ◻ CLOSED SURFACE IMPOUNDMENT
- - - - - OUTFALL

Shallow  
wells  
June 26, 27, 1992

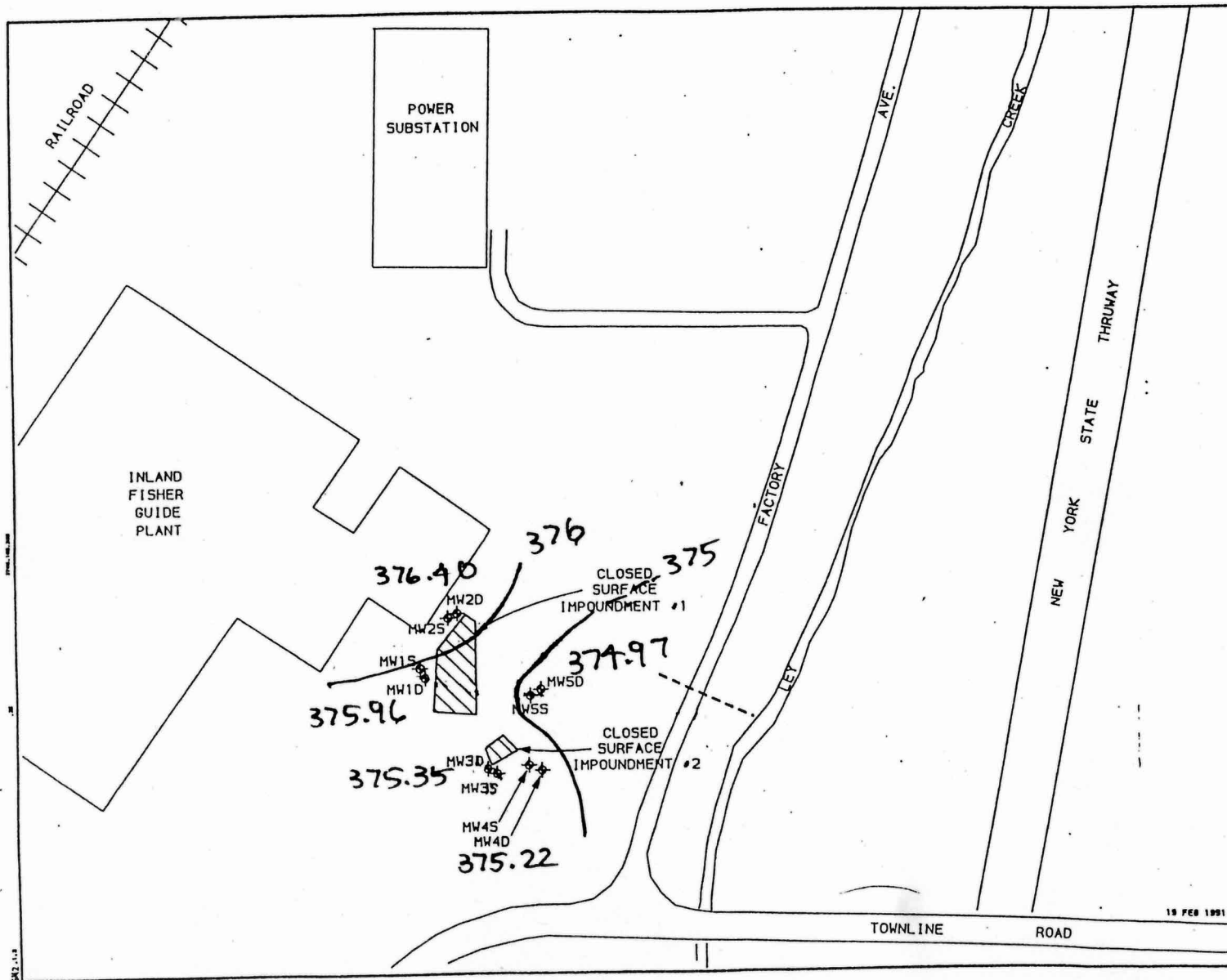


**O'BRIEN & GERE**  
ENGINEERS, INC.  
Syracuse, New York

FIGURE 2



FTO



GENERAL MOTORS CORPORATION  
INLAND FISHER GUIDE DIVISIO  
SYRACUSE, NEW YORK

SITE MAP



LEGEND

- MONITORING WELL
- ◻ CLOSED SURFACE IMPOUNDMENT
- - - - - OUTFALL

Deeper wells  
June 26, 27  
1992

0 200 400  
SCALE IN FEET

**O'BRIEN & GERE**  
ENGINEERS, INC.  
Syracuse, New York

FIGURE 3

## **APPENDIX C**

### **OPERATIONS & MAINTENANCE INSPECTION WORKSHEET FORMS**

**APPENDIX C**  
**Generic Operation and Maintenance**  
**Inspection Form**

**Part One—Pre-Inspection Planning Guide**

**Part Two—Field Inspection Guide**

**Part Three—Compliance Decision Making**

# **Pre-Inspection Planning Guide**

## **Part One**

### **APPENDIX C**



## PART ONE

The field inspector and the enforcement official will meet and complete four tasks. Those tasks are: 1) review enforcement and permitting actions taken to date at the facility, 2) review the owner/operator's sampling and analysis program, 3) review the owner/operator's O&M program, and 4) prepare site-specific inspection objectives.

1. Facility identification number NYD002239440
2. Name of facility contact William Kochem  
phone number (315) 432 5314
3. Address of facility 1000 Town Line Road  
Syracuse NY 13221

4. Does the facility have:

Interim Status? (go to 5a)

detection monitoring

assessment monitoring

corrective action (§3008(h))

*alternate monitoring system*

Permit Status? (go to 5b)

detection monitoring

compliance monitoring

corrective action

5a. Past actions taken at facility (interim status)

Type

Date(s)

Operation and Maintenance Inspection \_\_\_\_\_

Comprehensive (Ground-Water) 11/91

Monitoring Evaluation \_\_\_\_\_

Case Development Inspection \_\_\_\_\_

RCRA Facility Assessment \_\_\_\_\_

Compliance Evaluation Inspection \_\_\_\_\_

Ground-Water Task Force Investigation \_\_\_\_\_

Complete the following questions in regard to the actions listed on the previous page:

- Do you have a copy of completed inspection reports or site studies? Yes X No
- For each, summarize deficiencies identified in the owner/operator's sampling program and/or the owner/operator's operation and maintenance program.

- 1) Presample water levels not measured
- 2) Groundwater samples not <sup>all</sup> collected as soon as sufficient recovery occurred. Waited until next day.
- 3) Cyanide not sampled for
- 4) LNAPL not properly sampled.
- 5) Wells need to be painted, labeled, and have aprons repaired.
- 6) Wells 1S, 3S, 3D damaged and need to be evaluated and repaired.

Go to 6a.

**5b. Actions taken at the facility (permit status)**

Type	Date
• Permit Issuance - <i>draft</i>	<u>9/19/91</u>
• Operation and Maintenance Inspection	_____
• Comprehensive (Ground-Water)	_____
• Monitoring Inspection	_____
• Case Development Inspection	_____
• Compliance Evaluation Inspection	_____
• Other	_____

Complete the following in regard to the actions listed above:

- Do you have a copy of the permit and copies of inspection reports completed after permit issuance? Yes \_\_\_ No \_\_\_ *NA*
- Summarize deficiencies identified after permit issuance regarding the owner/operator's operation and maintenance program.

*NA*

**Go to 6b**

6a. Identify enforcement actions issued to the facility in regard to interim status violations.

Action

Date(s)

- §3008(a) complaint/order
- §3013 complaint/order
- §3008(h) complaint/order
- §7003 complaint/order
- Referral for litigation
- Other

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

NA

Complete the following regarding the actions listed above:

- For each, identify if the enforcement action is focused on the owner/operator's sampling and analysis program and/or the owner/operator's operation and maintenance program. Summarize relevant requirements imposed on the owner/operator.

**Go to 7**

6b. Identify enforcement actions issued to the facility after the permit issuance date.

<u>Action</u>	<u>Date(s)</u>
• §3008(a) complaint/order	_____ NA
• §3013 complaint/order	_____
• §3008(h) complaint/order	_____
• §7003 complaint/order	_____
• Referral for litigation	_____
• Other	_____

Complete the following regarding the actions listed above:

- For each, identify if the enforcement action focused on the owner/operator's sampling and analysis program and/or the owner/operator's operation and maintenance program. Summarize relevant requirements imposed on the owner/operator.

NA

Go to 7

022

7. Review and summarize the owner/operator's sampling and analysis plan. (Note: Revise or add to the table if permit conditions dictate a different requirement the owner/operator must follow.) Does the Sampling and Analysis Plan:	Y/N
Include provisions for the measurement of static water elevations in each well prior to each sampling event?	Y
Specify the device to be used for measuring water level elevations?	Y
Specify the procedure for measuring water levels?	N
Provide for the measurement of depth to standing water and depth to the bottom of the well to 0.01 feet?	N
Explain whether dedicated or non-dedicated sampling equipment is used and the type of sampling equipment?	N
Describe procedures for evacuating wells?	Y
Provide for the use of sampling devices constructed of inert materials such as fluorocarbon resin or stainless steel?	N
Provide for dedicated sampling devices for each well or alternately provide for decontamination of sampling devices and the collection of blanks between wells? field blank	Y
Provide for the collection and containerization of samples in the order of volatilization potential?	Y
Identify the preservation methods and sample containers the owner/operator will use?	Y
Describe procedures for transferring samples to off-site laboratories?	Y
Describe a chain-of-custody program which includes the use of sample labels, sample seals, field logbooks, chain-of-custody records, sample analysis request sheets, and laboratory logbooks?	Y
Include provisions for collection of field, trip, and equipment blanks?	Y
Include an inventory of sampling equipment and sampling devices used as part of the monitoring program?	Y
Include detailed operating, calibration, and maintenance procedures for each sampling device?	N

(Continued)

O&amp;M Inspection Guide...B-6

(Continued from previous page)	Y/N
Include maintenance schedules for sampling equipment? (Refer to Appendix D for discussion of maintenance techniques for gas bladder pumps.)	N
Include decision criteria to be used to replace or repair sampling equipment and/or monitoring wells?	N
*Describe in detail sample handling procedures in place at the owner/operator's laboratory (refer to RCRA Laboratory Audit Inspection Guide for more detail)?	NA
*Describe in detail the procedures that will be used to perform analyses in the owner/operator's laboratory (refer to RCRA Laboratory Audit Inspection Guide for more detail)?	NA
*Describe in detail quality assurance/quality control procedures in place? (refer to RCRA Laboratory Audit Inspection Guide for more detail.)	NA

\*NOTE: *The RCRA Laboratory Audit Inspection Guide (RCRA Ground-Water Monitoring Systems)* describes the information the owner/operator should include in the Sampling and Analysis Plan regarding the owner/operator's laboratory program. The inspector may want to supplement the checklist in this manual with the checklist in the *RCRA Laboratory Audit Inspection Guide* while planning an operation and maintenance inspection.

Go to 8

## COMMENTS ON SAMPLING AND ANALYSIS PLAN

Sampling and Analysis Plan was revised and submitted 3/17/92. This plan has been reviewed and comments drafted. Company will be sent the response upon completion of O+M Inspection.



8. Complete the following table. Use a separate entry for each well and piezometer in the monitoring system:

Identification Number	Type of Well Sampling Equipment (pump or bailer)	Depth to Water Last Inspection (if available)	Depth to Bottom Last Inspection (if available)	Notes/Comments
1. MW-1S	SS Bottom-Fill Bailer	7.90	installed (12.0) 9.26	Damaged during closure
2. MW-1D	"	9.37	28.82	
3. MW-2S	"	10.37	15.26	
4. MW-2D	"	11.91	30.15	
5. MW-3S	"	8.86	installed (14.0) 16.51	Damaged during closure
6. MW-3D	"	11.72	32.02	
7. MW-4S	"	11.50	16.73	
8. MW-4D	"	12.56	36.87	
9. MW-5S	"	9.08	16.89	
10. MW-5D	"	10.06	36.70	
11.				

After working through Part One, the enforcement official and the field inspector should know:

- the number and location of monitoring wells and piezometers at the facility;
- the procedures and techniques the owner/operator uses to collect ground-water samples;
- the details of the owner/operator's operation and maintenance program in-place at the facility; and
- the existence and nature of any permitting or enforcement action which may affect the field inspection.

The inspector will need the following equipment to conduct the field inspection:

- facility map with locations of wells and piezometers
- bound field notebook
- camera
- weighted tape measure or electronic water level indicator (made of inert material),
- deionized water, hexane (or laboratory strength cleaner), and sterile, disposable paper towels or gauze for decontamination of tape measure or probe
- surveyor's chain

(Note: additional equipment will be needed if the inspector wishes to obtain a split sample from the owner/operator.)

**Field Inspection Guide**

**Part Two**

**APPENDIX C**

## PART TWO

The field inspector will complete four tasks during the field inspection. They are:

1) review the operating record to identify evidence of deficiencies in the owner/operator's sampling and/or operation and maintenance programs; 2) visually inspect each well and piezometer for evidence of damage or deterioration; 3) obtain measurements from the operations record of depths of water levels and well depths for each well and piezometer; and 4) visually observe the owner/operator's field crew as they collect ground-water samples.

Name of inspector(s) Luanne Whitbeck

Date(s) of inspection 6/25/92

<b>1. Review the operating record of the facility.</b> <b>Does the operating record:</b>	<b>Y/N</b>
Include annual reports of ground-water monitoring results including ground-water level data from each well and piezometer in the monitoring system?	Y
Include an inventory of all sampling devices and purging equipment in use at the facility and information on model number, serial number and manufacturers name?	N
Include detailed operating, calibration and maintenance procedures for each sampling device?	N
Describe decision criteria to be used to replace or repair sampling equipment and/or monitoring wells?	N
Include schedules for performing operation and maintenance activities related to the ground-water monitoring system?	N
Include records for ground-water monitoring which provide information on 1) the date, exact place and time of sampling or measurements; 2) the individual(s) who performed the sampling or measurements; 3) the date(s) analyses were performed; 4) the analytical techniques or methods used; and 5) the results of such analyses?	Y
Include records of all monitoring information including all calibration and maintenance records? <u>Kept at lab</u>	N
Include records of monitoring information including determination of ground-water surface elevations?	Y
Include a determination of ground-water flow rate and direction(s) in the uppermost aquifer on an annual basis (e.g., prepare a potentiometric map annually using data collected during the year)?	Y
Provide for more frequent and intensive inspection of wells constructed of non-inert casing such as PVC? (Refer to Appendix A for permit example.)	NA

**COMMENTS ON OPERATING RECORD**

Records kept on site appear to be well organized. Missing items will be addressed separately in Department's review of revised Sampling & Analysis Plan.

2. Visually inspect each well and piezometer and complete the table below (one line entry for each well or piezometer):

Well/ Piezometer	Survey Mark Present?	Standing or Ponded Water?	Evidence of Collision Damage?	Evidence of Frost Heaving?	Evidence of Casing De- gradation?	Lock in Place?	Evidence of Well Sub- sidence?	Photograph Taken?
MW-1S	No-cut level	N	N	N	N	Y	N	#9
MW-1D	"	N	IN	N	N	Y	N	#10
MW-2S	"	N	N	N	N	Y	N	#8
MW-2D	"	N	N	N	N	Y	N	#8
MW-3S	No-cut level	Adjacent- Not at	Yes- repaired	N	N	Y	N	#3
MW-3D	No-cut level	well	No	N	N	Y	N	#1, 2
MW-4S	"	N	N	N	N	Y	N	#5
MW-4D	"	N	N	N	N	Y	N	#4
MW-5S	"	N	N	N	N	Y	N	#6
MW-5D	"	N	N	N	N	Y	N	#6

COT

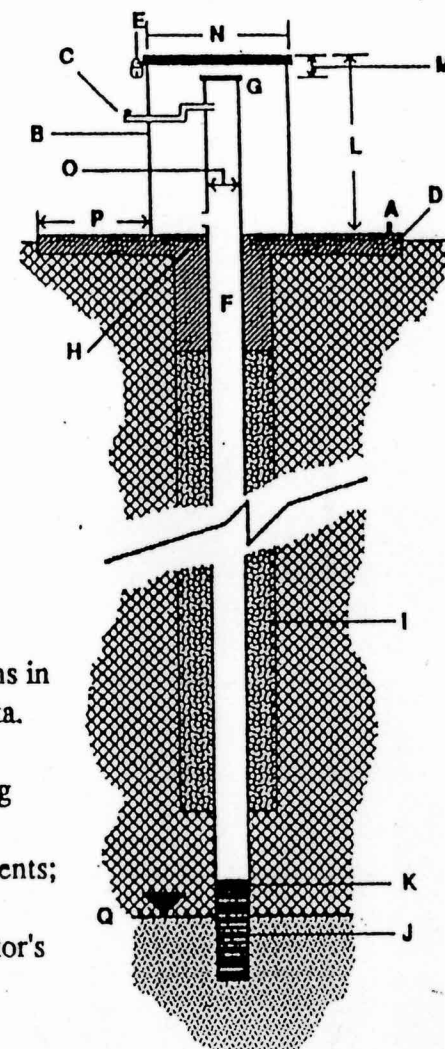
3. Obtain data on depth to standing water and depth to the bottom of each monitoring well and piezometer in the owner/operator's monitoring system. Record depth measurements to the nearest 0.01 feet. Record the measurements

Date 1992	Well/ Piezometer I.D. No.	Depth to Water (0.01')	Depth of Well/ Piezometer (0.01')
6/26	MW-1S	6.58	13.78
6/26	1D	7.81	29.31
6/26	2S	7.62	15.56
6/25	2D	9.79	30.39
6/25	3S	7.68	16.56
6/25	3D	8.26	32.79
6/25	4S	10.05	17.23
6/25	4D	10.38	37.47
6/26	5S	8.75	17.32
6/26	5D	8.05	37.00

Key:

- A - survey elevation mark
- B - protective outer casing
- C - gas vent
- D - concrete apron
- E - fitted lock
- F - primary casing material
- G - cap for primary casing
- H - bore hole seal
- I - annular space seal
- J - well screen
- K - filter pack
- L - height of riser
- M - elevation difference
- N - diameter of outer casing
- O - diameter of primary casing
- P - radius of apron
- Q - water level below surface

1. The field inspector has several options in collecting ground water elevation data. The inspector may:
  - a. obtain past data from the operating record; and/or
  - b. take his/her own depth measurements; and/or
  - c. obtain data from the owner/operator's sampling crew.





4. Observe the owner/operator's staff as they collect ground-water samples at several wells. Complete the following table for each well (Note: revise or add to the table if permit conditions dictate a different requirement the owner/operator must follow):

Position/Title	Name	Sampling Experience (years and type)
Technician	Peter Loretto	~1 year

Well Identification Number <u>All</u>	Y/N	Photograph Taken Y/N
Did the sampling crew measure static water levels in the well and well depths prior to the sampling event?	Y	N
Did the sampling crew use a steel tape or electronic device to take depth measurements?	Y	
Did the sampling crew record depths to +/- 0.01 feet?	Y	
Did the sampling crew follow these procedures: 1. remove locking and protective cap; 2. sample the air in the well head for organic vapors; 3. determine the static water level; and 4. lower an interface probe into the well to detect immiscible layers.	Y NA Y Y <del>NA</del>	
If immiscible samples were collected, were they collected prior to well purging?		
Did the sampling crew evacuate low yielding wells to dryness prior to sampling?	Y	
Did sampling crew evacuate high yielding wells so that at least three casing volumes were removed? <u>pH, SC, &amp; T each volume</u>	Y	
Did the sampling crew collect the purge water for storage and analysis or for shipment off-site to a RCRA treatment facility? <u>55 gal drum</u>	Y	
Were sampling devices constructed of fluorocarbon resins or stainless steel? <u>SS</u>	Y	✓



(Continued)

Well Identification Number <u>A 11</u>	Y/N	Photograph Taken Y/N
If the sampling crew used dedicated samplers, did they disassemble and thoroughly clean the devices between samples?	Y	N
If samples are collected for organic analyses, did the cleaning procedure include the following steps: 1. non phosphate detergent wash 2. tap water rinse 3. distilled/deionized water rinse 4. acetone rinse 5. pesticide-grade hexane rinse? <i>detergent with ILGWU see STAP EPA protocols</i>	Y	
If samples are collected for inorganic analyses, does the cleaning procedure include the following steps: 1. dilute acid rinse (HNO <sub>3</sub> or HCL) 2. distilled/de-ionized water rinse?	Y	
Did the sampling crew take trip blanks, field blanks and equipment blanks? <i>1 trip per day, 1 equipment per event</i>	Y	
If the sampling crew used bailers, were they bottom valve bailers?	Y	
If the sampling crew used bailers, was "teflon" coated wire, single strand stainless steel wire or monofilament used to raise and lower the bailer? <i>Recommended monofilament</i>	N	
If the sampling crew used bailers, did they lower the bailer slowly to the well?	Y	
If the sampling crew used bailers, were the bailer contents transferred to the sample container to minimize agitation and aeration?	Y	
Did the sampling crew take care to avoid placing clean sampling equipment, hoses, and lines on the ground or other contaminated surfaces prior to insertion in the well?	Y	
If the sampling crew used dedicated bladder pumps: Was the compressed gas from an oilless compressor certified quality commercial compressed gas cylinder? If not, was a suitable oil removal purification system installed and maintained?	NA	
Was the bladder pump controller capable of throttling the bladder pump discharge flow to 100 ml/min or less for continuous periods of at least 20-30 seconds without restricting liquid discharge?	NA	✓

(Continued)

Well Identification Number <u>All</u>	Y/N	Photograph Taken Y/N
Were samples taken from the bladder pump discharge tube, and not from any purge device discharge tube?	NA	N
Was the bladder pump discharge flow checked for the presence of gas bubbles before each sample collection, as a test for bladder integrity?	NA	
Was bladder pump flow performance monitored regularly for dropoff in flow rate and discharge volume per cycle?	NA	
Was the bladder pump incorporated in a combination sample-purge pump design which can expose the bladder pump interior and discharge tubing to the pump drive gas? If so, were operating procedures established and followed to prevent at all times the entry of drive gas into the sample flow or into the bladder pump interior?	NA	
Did the sampling crew collect and containerize samples in the order of the volatilization sensitivity of the parameters?	Y	
Did the sampling crew measure the following parameters in the field: pH, temperature, specific conductance?	Y	
Did the sampling crew sample background wells before sampling downgradient wells?	NA	
Did the sampling crew use fluorocarbon resin or polyethylene containers with polypropylene caps for samples requiring metals analysis?	Y	
Did the sampling crew use glass bottles with fluorocarbon resin-lined caps for samples requiring metals analysis?	N	
If metals were the analytes of concern, did the sampling crew use containers cleaned with nonphosphate detergent and water, and rinsed with nitric acid, tap water, hydrochloric acid, tap water and finally Type II water? <u>lab cleaned</u>	NA	
If organics were the analytes of concern, did the sampling crew use containers cleaned with nonphosphate detergent, rinsed with tap water, distilled water, acetone, and finally pesticide quality hexane? <u>lab cleaned</u>	NA	
Did the sampling crew filter samples requiring analysis for organics?	N	✓

**COMMENTS ON SAMPLING PROGRAM**

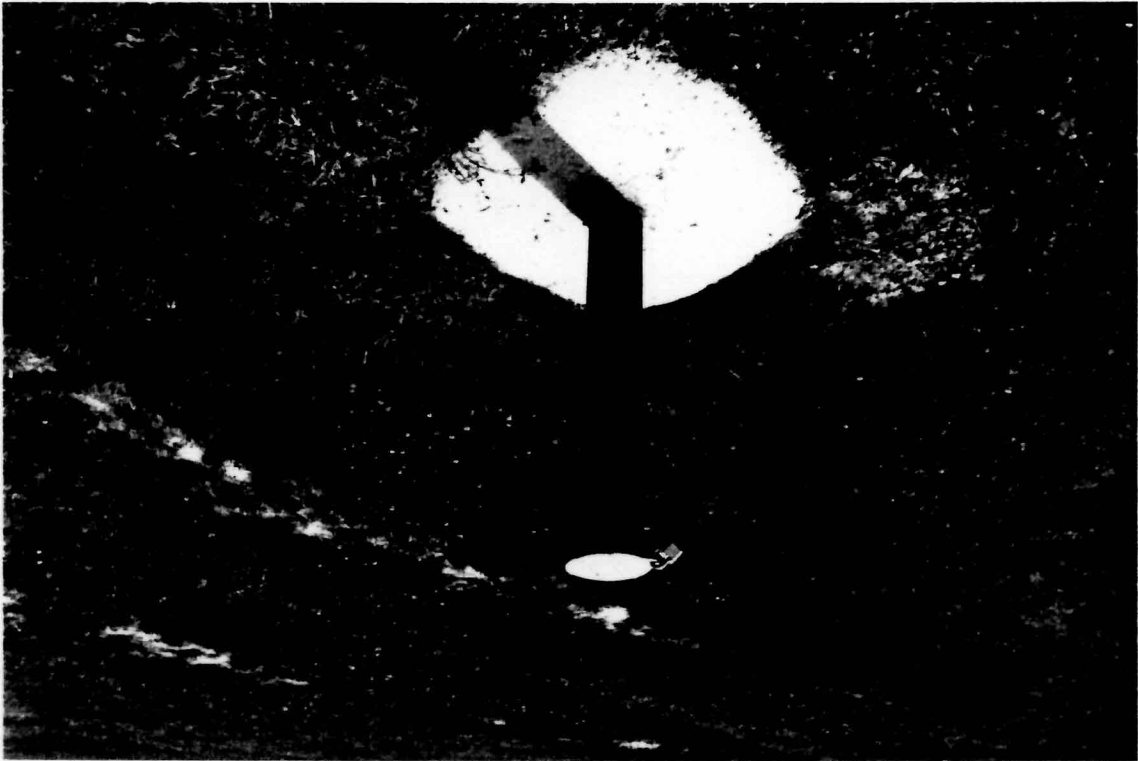
After working through Part Two, the field inspector will have:

- assessed whether the owner/operator's sampling crew departed from written sampling and analysis procedures as contained in the owner/operator's sampling and analysis plan (interim status) or in the owner/operator's RCRA permit (permit status);
- identified deficiencies in the way the owner/operator's sampling crew collected ground-water samples;
- identified deficiencies in the owner/operator's program to ensure ongoing maintenance of sampling devices and monitoring wells/piezometers;
- identified deficiencies in the owner/operator's operating record (Does the operating record have all the information in it that is required?); and
- collected field data that will allow the enforcement official to construct potentiometric maps and assess the viability of individual wells.

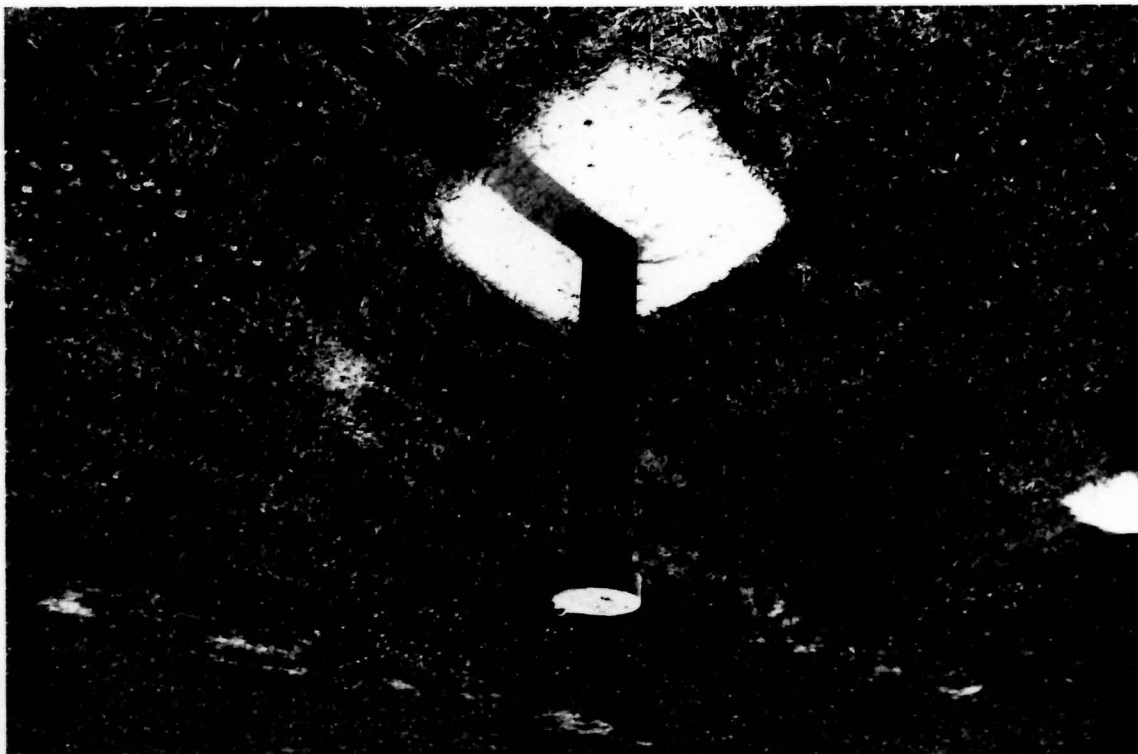
**PHOTOGRAPHS**

**APPENDIX D**

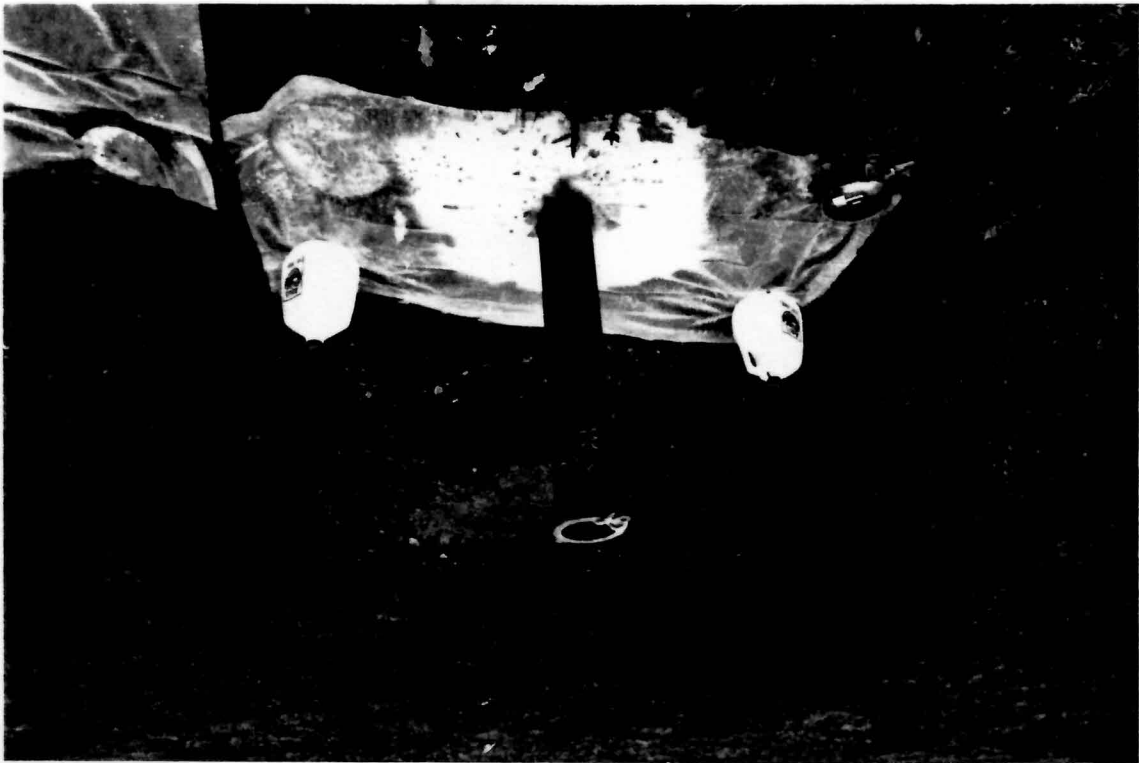
Monitoring Well MW-1D



Monitoring Well MW-1S



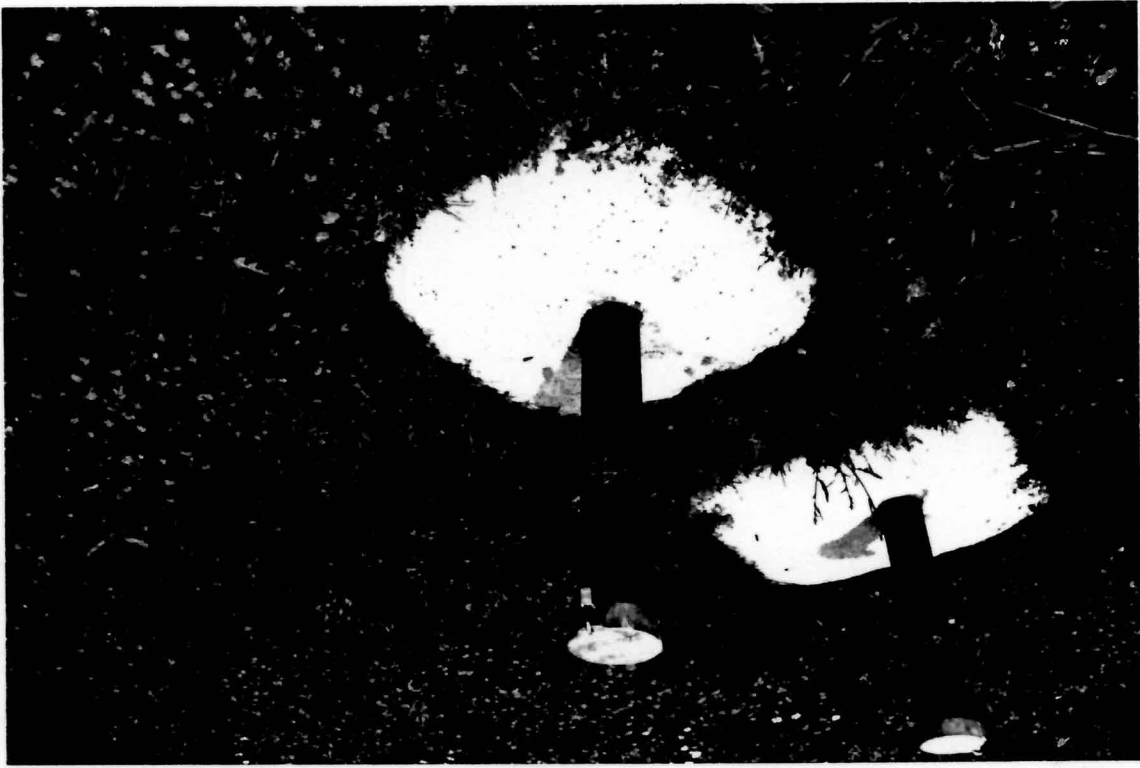
Monitoring Well MW-3S



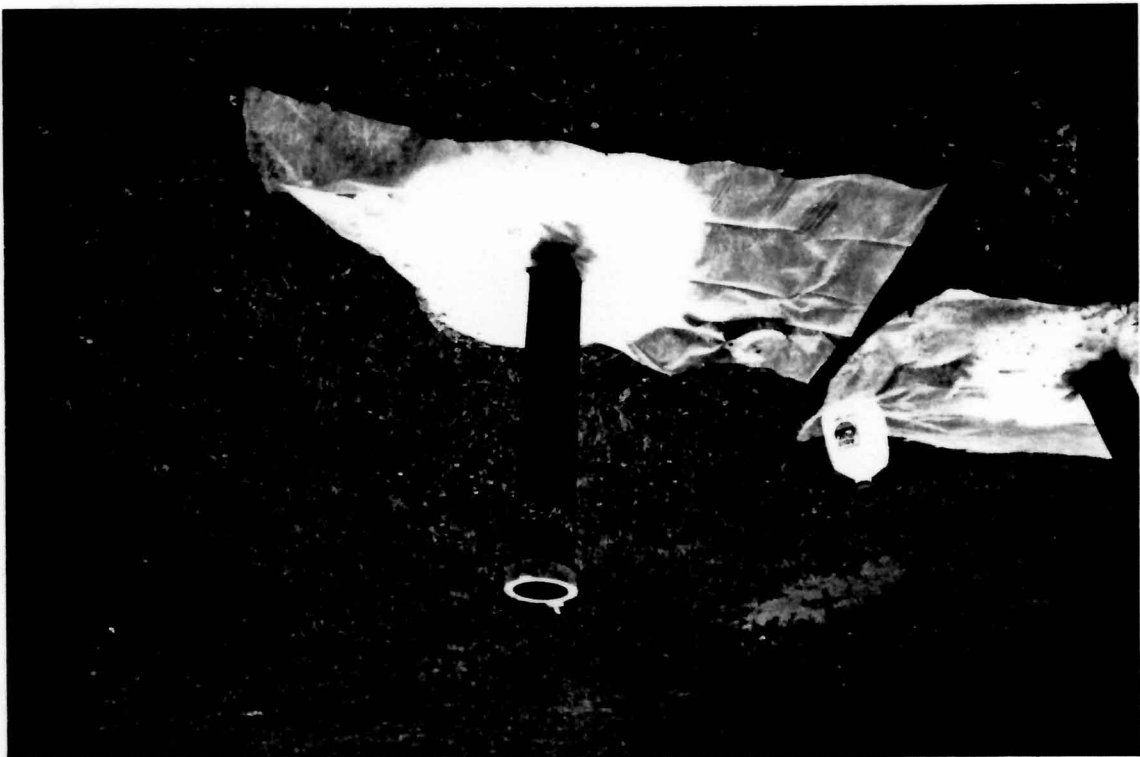
Monitoring Wells MW-2S and MW-2D



Monitoring Wells MW-4S and MW-4D



Monitoring Well MW-3D



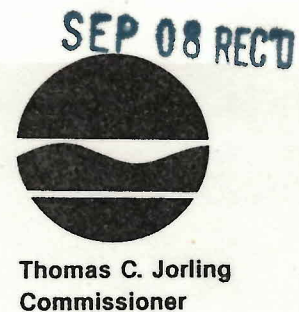


Monitoring Wells MW-5S and MW-5D



New York State Department of Environmental Conservation  
50 Wolf Road, Albany, New York 12233

September 2, 1992



Mr. William E. Kochem, Jr.  
Supervisor, Plant Engineering  
Inland Fisher Guide Division  
General Motors Corporation  
1000 Town Line Road  
Syracuse, NY 13221

CA 92-09/02/92

Dear Mr. Kochem:

Re: 1991 Annual Groundwater Quality  
Assessment - NYD002239440

The New York State Department of Environmental Conservation has reviewed the above-referenced report, received March 5, 1992.

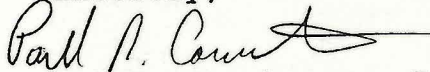
Many deficiencies and inaccuracies were noted during our review. These are detailed in the enclosed comments.

Fisher Guide is to address these comments and submit a revised report to the Department within 45 days of the date of this letter. Additionally, Fisher Guide is to initiate a six-month accelerated monitoring program for total lead in all 10 monitoring wells within 30 days of the date of this letter.

The QA/QC portions of your report is currently being reviewed by the chemist and any additional comments will be sent under separate cover.

Failure to submit an adequate report is a violation of 6NYCRR Part 373-3.6(d)(iv) and may result in an enforcement action under the Environmental Conservation Law. If you have any questions during the revision process, please contact Ms. Luanne F. Whitbeck, of my staff, for technical assistance at (518) 457-9255.

Sincerely,



Paul R. Counterman, P.E.  
Director

Bureau of Haz. Waste Facility Mgmt.  
Division of Haz. Substances Regulation

Encl.

cc: E. Miles  
L. Whitbeck  
P. Patel  
J. Petiet  
J. Desai  
S. Eidt, Reg. 7  
G. Meyer, USEPA Reg. II  
A. Bellina, USEPA Reg. II  
M. Infurna, USEPA Reg. II  
J. Tomik, O'Brien & Gere

**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
DIVISION OF HAZARDOUS SUBSTANCES REGULATION  
ENGINEERING GEOLOGY SECTION'S COMMENTS ON  
GMC INLAND FISHER GUIDE DIVISION  
1991 ANNUAL GROUNDWATER REPORT**

**GENERAL**

All references and discussions utilizing the data analyzed at the wrong detection limits are to be deleted. Present and evaluate only the data (including total metals, not filtered metals) to be used for determining the impacts of the surface impoundments on the groundwater.

Fisher Guide has not fully determined the extent of hazardous waste or hazardous waste constituents in the groundwater as required by 6NYCRR 373-3.6(d)(4)(iv), nor have they made any recommendations for doing so. Fisher Guide has not determined the concentration of contaminants in the groundwater as required by 6NYCRR 373-3.6(d)(4)(iv) (see Section 2, paragraph 4 comment).

**SECTION 1 INTRODUCTION**

The Department's April 16, 1991 letter (regarding QA/QC for the 1989/1990 Annual Groundwater Report) indicated that inappropriate detection limits for chromium, mercury, nickel and lead were used in 1989 and 1990, and statistical analyses could not be performed on that data. Therefore, the reference to "baseline limits established by the accelerated monitoring program performed in 1989" for those parameters should be deleted. Additionally, the reference to statistics performed on 1991 data where "lower detection limits were utilized" is inaccurate. Lead was run at ten times the approved detection limit. Fisher Guide should clarify which parameters had accurate 1989 data, which had accurate 1991 baseline data, and delete references to those that do not have accurate baseline data. See attached Table 1 for appropriate detection limits and Table 2 for appropriate methods, preservatives and holding times.

In Paragraph 3, provide text discussing the fact that MW-2D, instead of MW-2S was sampled for the Appendix IX analyses.

**SECTION 2 - FIELD PROCEDURES**

Paragraph 4 - Fisher Guide did not analyze lead according to the approved Sampling & Analysis Plan, as amended by the May 15, 1991 letter from Fisher Guide to the NYSDEC, and the May 28, 1991 letter from the NYSDEC to Fisher Guide. The approved method was graphite furnace with a detection limit of 0.005 ppm. ICP with a detection

limit of 0.05 ppm was performed (per discussion with John Tomik, March 1992). Note that post-digestion spike analysis is required for graphite furnace atomic absorption spectroscopy. In the future, submit quarterly reports with the raw data as outlined in attached Table 3 within 30 days of the receipt of the data from the laboratory.

Paragraph 5 - Please explain the low groundwater elevation in Well MW-3D on September 24, 1991. Anomalies such as this are to be discussed in the Annual Groundwater Report. As stated in the April 23, 1992 letter to Fisher Guide, should a similar lower water level elevation be measured in the future, Fisher Guide is to verbally notify the Department within 7 days of the measurement. A meeting will be set up to determine what course of action needs to be taken.

### SECTION 3 - DATA ASSESSMENT

#### 3.01 Site Groundwater Flow Conditions

The Department's review of this section does not agree with all of Fisher Guide's evaluations of the groundwater flow directions.

The deep groundwater flow in September is NE near impoundment #1, trending to the SE near impoundment #2. Discussion should be included here on apparent change in groundwater flow direction.

The 376-foot contour for the deep groundwater flow is to be drawn on Figure 4. The 375 foot contour for the deep groundwater flow on Figure 6 appears to be incorrectly drawn. The elevations for MW-3S and MW-5S on Figure 4 are incorrect. Please correct the figures.

#### 3.02 Groundwater Quality Assessment

Please clarify the statement, "... samples to be submitted for PCBs and unfiltered organics should be obtained in a manner that will minimize the amount of sediment collected." Describe the method to be used and amend the Sampling and Analysis Plan if necessary.

A method to eliminate turbidity, used with good results at another facility, consists of essentially redeveloping the wells 3 to 7 working days before the sampling event. The redevelopment consists of pumping the well from the bottom of the screen to reduce the amount of sediment present during sampling events. The well is then purged and sampled according to the approved Sampling and Analysis Plan. If Fisher Guide chooses to use this method, the Sampling and Analysis Plan is to be modified.



### 3.02.1 PCB Analysis

What corrective actions does Fisher Guide plan to take to reduce the levels of PCBs in the MW-2S area?

### 3.02.2 Volatile Organic Analyses

Paragraph 6 - With one exception, carbon disulfide is found downgradient in concentrations greater than upgradient. This would suggest that the surface impoundments are contributing to the degradation of groundwater quality. Discuss this situation. Statistics are to be performed on carbon disulfide data. Please discuss "naturally occurring" carbon disulfide and provide references.

### 3.02.3 Inorganic Analysis

In this section revise the text and discuss all metals detected and their trends, not just those found at concentrations greater than the groundwater standard.

Paragraph 1 - The detection limit for lead for both total and filtered analyses for most wells in the September 25, 1991 and December 20, 1991 sampling events, and for the filtered lead for August 7, 1991 sampling event was too high. The lead target detection limit must be 0.005 ppm. It is misleading to state that the 1991 inorganic compounds detected above the MDL correlate with 1990 data and infer that conditions are stable. Delete this sentence.

Paragraph 2 - It is misleading for Fisher Guide to state that lead was detected above the class GA standards in 4 wells, when a detection limit twice the groundwater standard was used. Fisher Guide does not know whether or not lead exceeded the groundwater standard in other wells at the site. This paragraph should state that lead was detected above 0.05 ppm in those 4 wells. Rewrite this paragraph.

Paragraph 3 - Add text discussing how the total metals data for 1991 compared to previous data. Use only that data analyzed at the correct detection limits.

Paragraph 4 - Again, it is to be noted that the wrong detection limit was used for filtered lead. Of a total of 40 filtered lead samples in 1991, 24 had the wrong detection limit. Filtered zinc was also detected in Well MW-5D. Filtered chromium was also detected in MW-1S at a concentration of 0.09 ppm during the December 1991 event. This exceeds the Class GA standard of 0.05 ppm. Rewrite this paragraph to include this data.

Explain why filtered metals were discussed at the detection limit, and total metals at the groundwater standard (see first comment on this subsection). This is inconsistent.

### 3.03 Appendix IX Analysis

Provide text indicating that the wrong well was sampled and what was done about it.

IFG did not provide the data for dioxins, herbicides or pesticides. Please provide the data within 15 days of the date of these comments. If the samples were not analyzed for these parameters, IFG must do so within 30 days of the date of these comments. The data must be submitted within 15 days of receipt from the laboratory.

Paragraph 1 - In the cover letter for this Report, Fisher Guide stated that the Appendix IX data for Well MW-2S would be submitted to the Department under separate cover. This data has not yet been received. This information is due to the Department within 15 days of the date of these comments.

Paragraph 2 - The metals detected during the Appendix IX sampling which are not currently part of the program (barium, beryllium, cobalt, copper and vanadium) are in higher concentrations upgradient (MW-2D) than they are downgradient. Therefore, they are not reasonably expected to be derived from the regulated units. For these reasons, not because they were below groundwater standards as stated by Fisher Guide, they do not need to be added to the parameter list at this time. The regulations require that hazardous constituents (Appendix 23 of 6NYCRR) detected in the groundwater underlying a regulated unit, and that are reasonably expected to be in or derived from waste contained in the regulated unit, are to be included in the Groundwater Monitoring Program. This does not mean hazardous constituents found at less than the groundwater standard do not need to be included as implied by Fisher Guide. Refer to the February 6, 1991 letter.

### 3.04 Statistical Analysis

Paragraph 1 - Delete from the discussion any 1989 baseline data that was generated at the wrong detection limits (chromium, mercury, nickel, lead). In Table 9, delete the 1989 baseline data and statistics for these parameters. It is not appropriate to present information in this manner. Again, Fisher Guide was notified in the June 6, 1991 letter that statistics were not to be performed using data with inappropriate detection limits.

In Table 9, the values indicated for lead for both wells for September 25, 1991 and December 20, 1991 are incorrect. Table 4 indicates that the correct value is <0.05 ppm, not <0.005 ppm as

listed in Table 9. Again, because the wrong detection limits were used, the data is not valid and statistics cannot be performed. Fisher Guide has sampled the two wells 14 times since the program started (two and one-half years), and still has only 6 values for total lead measured at the appropriate detection limit.

Fisher Guide is, therefore, directed to perform an accelerated monitoring program consisting of monthly sampling for 6 months for all 10 wells for unfiltered lead in addition to the regular quarterly sampling for all parameters. This sampling is to begin within 30 days of the date of these comments. The data is to be submitted to the Department within 15 days of receipt from the laboratory. Quarterly monitoring is to continue as scheduled.

Table 9 has two typographical errors. Chromium for September 25, 1991 for MW-2S is <0.01 ppm, not 0.06 ppm as listed. Zinc for June 18, 1991 for MW-4D is <0.02 ppm, not <0.01 ppm as listed. Correct the table.

Clarify why the sampling date in the tables is listed as December 20, 1991, and the sampling sheets and the chain-of-custody indicate that the samples were collected on December 12, 1991.

Clarify why total metals were collected on June 17, 1991 and filtered metals were collected on August 7, 1991.

Clarify why the sampling sheets indicate that water levels were measured on August 7, 1991, and the tables indicate that they were measured on August 12, 1991.

Explain why samples were collected on April 30, 1991 instead of in mid-March. There were only 6 weeks between the April and June sampling events. Sampling events are to be as evenly spaced as possible throughout the year to provide seasonality. The Department is looking for seasonality, not just four sampling events per year. Please provide a schedule with the approximate sampling dates (week and month).

Table 10 is to be deleted. Statistical analyses are to be performed on unfiltered metals only for comparison to background and groundwater standards.

Paragraph 1 - In addition to resubmitting statistics in this report, Fisher Guide is to submit to the Department for review and approval the statistical monitoring methods to be used on the groundwater data.

Paragraph 1 - Please provide the calculations performed on the PCB data which indicated that they are not normally distributed. Provide the calculations showing that the transformed data is also not normally distributed. If the transformed data is not normally

distributed, why didn't Fisher Guide run a non-parametric test on the data? Perform an appropriate test on the data (see EPA PB89-151047-Statistical Analysis of Groundwater Monitoring at RCRA Facilities - Interim Final Guidance) and supply a revised Table 7.

Paragraph 2 - Recalculate the tolerance intervals for the inorganics using only those data detected, and those non-detects at the appropriate detection limits. Combine all useable data for this procedure. Supply a revised Table 9.

#### Paragraph 2

Since MW-2D was sampled and not MW-2S, tolerance intervals cannot be constructed and used for comparison to the 1991 data. Provide text discussing this issue.

#### 3.04.1 Volatile Organic Constituents

Please explain why a different statistical method was not used - e.g., ANOVA, non-parametric ANOVA, test of proportions - rather than only doing tolerance limits when 50% or more of the analyses were above detection limits.

#### 3.04.2 Unfiltered Metals

Fisher Guide must show that the statistical methods developed for data sets with more than 50% of sample concentrations at less than detection limits are not applicable. See EPA PB89-151047 - Statistical Analysis of Groundwater Monitoring at RCRA Facilities - Interim Final Guidance.

Upper tolerance limits for unfiltered metals must be recalculated. See comment in 3.04, Paragraph 2 above. Upon determining which data values are useable, an appropriate statistical method is to be utilized. Show normality or non-normality. Justify why the chosen method is appropriate. Provide documentation.

Paragraph 2 - Last sentence - Lead was not ". . .below the lowered detection limits." as stated. In September and December, the higher limit of 0.05 ppm was used. Correct the text.

#### 3.04.3 Filtered Metals

Delete this section. Only unfiltered metals are to be compared to background and to groundwater standards.

#### 3.05 Summary of Groundwater Quality Assessment

Paragraph 1 - Unless Fisher Guide can adequately demonstrate that downgradient wells are more turbid than upgradient wells, the discussion regarding turbidity is to be deleted. The RCRA Program



considers total metals data more indicative of the subsurface environment because of the potential of the metals to move given a change in pH of the groundwater. RCRA is concerned about contaminants left in both the soil and the groundwater. Presenting a discussion of turbidity and not presenting a discussion on the rate and extent of contamination is a violation of 6NYCRR 373-3.6(d)(4)(iv). Unfiltered downgradient data are to be statistically compared to unfiltered upgradient data. Rewrite this paragraph and discuss the actual values of metals in the downgradient wells versus the upgradient wells. Discuss any statistical triggers. Discuss recommendations based on this information.

Paragraph 2 - Fisher Guide has not provided any information to support the statement, "...carbon disulfide. . . is likely attributed to historical groundwater quality impacts not associated with the impoundments." Either provide documentation to support the statement or delete it. If carbon disulfide is increasing downgradient, then the extent of contamination has not been determined. Perform statistics on carbon disulfide and provide text discussing the levels of carbon disulfide downgradient compared to the levels upgradient. Rewrite this paragraph to reflect these comments.

6NYCRR 373-3.6(d)(4)(iv) requires that both the rate and extent of hazardous waste or hazardous constituents be presented in the Annual Report. Fisher Guide is to present recommendations in this section for further groundwater investigative work to determine the extent of contamination.

Paragraph 3 - The discussion of the statistics will need to be rewritten upon recalculation of some of the statistics. It is premature to state that there have been no impacts to the groundwater from the closed surface impoundments based on inaccurate detection limits and statistics performed on the data to date. At a minimum, total nickel, zinc, and chromium triggered statistically in Well MW-5S. (Chromium triggered statistically even though the detection limits used in the 1989 baseline data are too high.) Sampling is to continue, but further investigative work is needed. Rewrite this paragraph to reflect these comments.

#### APPENDIX A GROUNDWATER SAMPLING PROCEDURES

Any changes necessary to this Appendix will be addressed in the Department's comments on the revised Surface Impoundment Closure Plan, submitted March 17, 1992 by Fisher Guide. See the Department's response, dated August 24, 1992.

APPENDIX B  
GROUNDWATER SAMPLING LOG

The pre-sampling water level measurement is to be noted on the form.

APPENDIX C  
LABORATORY DATA SHEETS - QUALITY DATA

and

APPENDIX E  
LABORATORY DATA SHEETS - APPENDIX IX DATA

The QA/QC will be reviewed by the chemist. Any comments will be sent under separate cover.

SECTION I  
SUPERFUND-CLP ORGANICS  
Superfund Target Compound List (TCL) and  
Contract Required Quantitation Limits (CRQL)\*

Volatiles	CAS Number	Quantitation Limits**	
		Low Water $\mu\text{g/L}$	Low Soil/Sediment <sup>a</sup> $\mu\text{g/Kg}$
1. Chloromethane	74-87-3	10	10
2. Bromomethane	74-83-9	10	10
3. Vinyl chloride	75-01-4	10	10
4. Chloroethane	75-00-3	10	10
5. Methylene chloride	75-09-2	5	5
6. Acetone	67-64-1	10	10
7. Carbon Disulfide	75-15-0	5	5
8. 1,1-Dichloroethylene	75-35-4	5	5
9. 1,1-Dichloroethane	75-35-3	5	5
10. 1,2-Dichloroethylene(total)	540-59-0	5	5
11. Chloroform	67-66-3	5	5
12. 1,2-Dichloroethane	107-06-2	5	5
13. 2-Butanone	78-93-3	10	10
14. 1,1,1-Trichloroethane	71-55-6	5	5
15. Carbon tetrachloride	56-23-5	5	5
16. Vinyl acetate	108-05-4	10	10
17. Bromodichloromethane	75-27-4	5	5
18. 1,2-Dichloropropane	78-87-5	5	5
19. cis-1,3-Dichloropropene	10061-01-5	5	5
20. Trichloroethene	79-01-6	5	5
21. Dibromochloromethane	124-48-1	5	5
22. 1,1,2-Trichloroethane	79-00-5	5	5
23. Benzene	71-43-2	5	5
24. trans-1,3-Dichloropropene	10061-02-6	5	5
25. Bromoform	75-25-2	5	5
26. 4-Methyl-2-pentanone	108-10-1	10	10
27. 2-Hexanone	591-78-6	10	10
28. Tetrachloroethene	127-18-4	5	5
29. Toluene	108-88-3	5	5
30. 1,1,2,2-Tetrachloroethane	79-34-5	5	5

Superfund Target Compound List (TCL) and  
Contract Required Quantitation Limits (CRQL)\*

Volatiles (continued)	CAS Number	Quantitation Limits**	
		<u>Low Water</u> $\mu\text{g/L}$	<u>Low Soil/Sediment<sup>a</sup></u> $\mu\text{g/Kg}$
31. Chlorobenzene	108-90-7	5	5
32. Ethyl Benzene	100-41-4	5	5
33. Styrene	100-42-5	5	5
34. Total Xylenes	1330-20-7	5	5

<sup>a</sup> Medium Soil/Sediment Contract Required Quantitation Limits (CRQL) for Volatile TCL Compounds are 125 times the individual Low Soil/Sediment CRQL.

\* Specific quantitation limits are highly matrix dependent. The quantitation limits listed herein are provided for guidance and may not always be achievable.

\*\* Quantitation Limits listed for soil/sediment are based on wet weight. The quantitation limits calculated by the laboratory for soil/sediment, calculated on dry weight basis, as required by the protocol, will be higher.

Superfund Target Compound List (TCL) and  
Contract Required Quantitation Limits (CRQL)\*

Semivolatiles	CAS Number	Quantitation Limits**	
		Low Water $\mu\text{g/L}$	Low Soil/Sediment <sup>b</sup> $\mu\text{g/Kg}$
35. Phenol	108-95-2	10	330
36. bis(2-Chloroethyl) ether	111-44-4	10	330
37. 2-Chlorophenol	95-57-8	10	330
38. 1,3-Dichlorobenzene	541-73-1	10	330
39. 1,4-Dichlorobenzene	106-46-7	10	330
40. Benzyl alcohol	100-51-6	10	330
41. 1,2-Dichlorobenzene	95-50-1	10	330
42. 2-Methylphenol	95-48-7	10	330
43. 2,2'-oxybis(1-Chloro- propane	108-60-1	10	330
44. 4-Methylphenol	106-44-5	10	330
45. N-Nitroso-di-n-propylamine	621-64-7	10	330
46. Hexachloroethane	67-72-1	10	330
47. Nitrobenzene	98-95-3	10	330
48. Isophorone	78-59-1	10	330
49. 2-Nitrophenol	88-75-5	10	330
50. 2,4-Dimethylphenol	105-67-9	10	330
51. Benzoic acid	65-85-0	50	1600
52. bis(2-Chloroethoxy) methane	111-91-1	10	330
53. 2,4-Dichlorophenol	120-83-2	10	330
54. 1,2,4-Trichlorobenzene	120-82-1	10	330
55. Naphthalene	91-20-3	10	330
56. 4-Chloroaniline	106-47-8	10	330
57. Hexachlorobutadiene	87-68-3	10	330
58. 4-Chloro-3-methylphenol (p-chloro-m-cresol)	59-50-7	10	330
59. 2-Methylnaphthalene	91-57-6	10	330
60. Hexachlorocyclopentadiene	77-47-4	10	330
61. 2,4,6-Trichlorophenol	88-06-2	10	330
62. 2,4,5-Trichlorophenol	95-95-4	50	1600
63. 2-Chloronaphthalene	91-58-7	10	330

Superfund Target Compound List (TCL) and  
Contract Required Quantitation Limits (CRQL)\*

Semivolatiles (continued)	CAS Number	Quantitation Limits**	
		Low Water $\mu\text{g/L}$	Low Soil/Sediment <sup>b</sup> $\mu\text{g/Kg}$
64. 2-Nitroaniline	88-74-4	50	1600
65. Dimethyl phthalate	131-11-3	10	330
66. Acenaphthylene	208-96-8	10	330
67. 2,6-Dinitrotoluene	606-20-2	10	330
68. 3-Nitroaniline	99-09-2	50	1600
69. Acenaphthene	83-32-9	10	330
70. 2,4-Dinitrophenol	51-28-5	50	1600
71. 4-Nitrophenol	100-02-7	50	1600
72. Dibenzofuran	132-64-9	10	330
73. 2,4-Dinitrotoluene	121-14-2	10	330
74. Diethylphthalate	84-66-2	10	330
75. 4-Chlorophenyl phenyl ether	7005-72-3	10	330
76. Fluorene	86-73-7	10	330
77. 4-Nitroaniline	100-01-6	50	1600
78. 4,6-Dinitro-2-methylphenol	534-52-1	50	1600
79. N-nitrosodiphenylamine	86-30-6	10	330
80. 4-Bromophenyl phenyl ether	101-55-3	10	330
81. Hexachlorobenzene	118-74-1	10	330
82. Pentachlorophenol	87-86-5	50	1600
83. Phenanthrene	85-01-8	10	330
84. Anthracene	120-12-7	10	330
85. Di-n-butyl phthalate	84-74-2	10	330
86. Fluoranthene	206-44-0	10	330
87. Pyrene	129-00-0	10	330
88. Butyl benzyl phthalate	85-68-7	10	330
89. 3,3'-Dichlorobenzidine	91-94-1	20	660
90. Benz(a)anthracene	56-55-3	10	330
91. Chrysene	218-01-9	10	330
92. bis(2-Ethylhexyl)phthalate	117-81-7	10	330
93. Di-n-octyl phthalate	117-84-0	10	330
94. Benzo(b)fluoranthene	205-99-2	10	330

Superfund Target Compound List (TCL) and  
Contract Required Quantitation Limits (CRQL)\*

Semivolatiles (continued)	CAS Number	Quantitation Limits**	
		<u>Low Water</u> $\mu\text{g/L}$	<u>Low Soil/Sediment</u> <sup>b</sup> $\mu\text{g/Kg}$
95. Benzo(k)fluoranthene	207-08-9	10	330
96. Benzo(a)pyrene	50-32-8	10	330
97. Indeno(1,2,3-cd)pyrene	193-39-5	10	330
98. Dibenzo(a,h)anthracene	53-70-3	10	330
99. Benzo(g,h,i)perylene	191-24-2	10	330

<sup>b</sup> Medium Soil/Sediment Contract Required Detection Limits (CRDL) for Semi-Volatile TCL Compounds are 60 times the individual Low Soil/Sediment CRDL.

\* Specific quantitation limits are highly matrix dependent. The quantitation limits listed herein are provided for guidance and may not always be achievable.

\*\* Quantitation limits listed for soil/sediment are based on wet weight. The quantitation limits calculated by the laboratory for soil/sediment, calculated on dry weight basis as required by the contract, will be higher.



Superfund Target Compound List (TCL) and  
Contract Required Quantitation Limits (CRQL)\*

Pesticides/PCBs	CAS Number	Quantitation Limits**	
		Low Water $\mu\text{g/L}$	Low Soil/Sediment <sup>c</sup> $\mu\text{g/Kg}$
100. alpha-BHC	319-84-6	0.05	8.0
101. beta-BHC	319-85-7	0.05	8.0
102. delta-BHC	319-86-8	0.05	8.0
103. gamma-BHC (Lindane)	58-89-9	0.05	8.0
104. Heptachlor	76-44-8	0.05	8.0
105. Aldrin	309-00-2	0.05	8.0
106. Heptachlor epoxide	1024-57-3	0.05	8.0
107. Endosulfan I	959-98-8	0.05	8.0
108. Dieldrin	60-57-1	0.10	16.
109. 4,4'-DDE	72-55-9	0.10	16.
110. Endrin	72-20-8	0.10	16.
111. Endosulfan II	33213-65-9	0.10	16.
112. 4,4'-DDD	72-54-8	0.10	16.
113. Endosulfan sulfate	1031-07-8	0.10	16.
114. 4,4'-DDT	50-29-3	0.10	16.
115. Endrin ketone	53494-70-5	0.10	16.
116. Methoxychlor	72-43-5	0.5	80.
117. alpha-Chlordane	5103-71-9	0.5	80.
118. gamma-Chlordane	5103-74-2	0.5	80.
119. Toxaphene	8001-35-2	1.0	160.
120. AROCLOR-1016	12674-11-2	0.5	80.
121. AROCLOR-1221	11104-28-2	0.5	80.
122. AROCLOR-1232	11141-16-5	0.5	80.
123. AROCLOR-1242	53469-21-9	0.5	80.
124. AROCLOR-1248	12672-29-6	0.5	80.
125. AROCLOR-1254	11097-69-1	1.0	160.
126. AROCLOR-1260	11096-82-5	1.0	160.

<sup>c</sup> Medium Soil/Sediment Contract Required Detection Limits (CRDL) for Pesticide TCL compounds are 15 times the individual Low Soil/Sediment CRDL.

\* Specific quantitation limits are highly matrix dependent. The quantitation limits listed herein are provided for guidance and may not always be achievable.

\*\* Quantitation Limits listed for soil/sediment are based on wet weight. The quantitation limits calculated by the laboratory for soil/sediment, calculate on dry weight basis, as required by the protocol, will be higher.

## SECTION II

### SUPERFUND-CLP INORGANICS

Superfund Target Compound List (TCL) and  
Contract Required Quantitation Limit

Parameter	Contract Required Quantitation Level ( $\mu\text{g/L}$ )
1. Aluminum	200
2. Antimony	60
3. Arsenic	10
4. Barium	200
5. Beryllium	5
6. Cadmium	5
7. Calcium	5000
8. Chromium	10
9. Cobalt	50
10. Copper	25
11. Iron	100
12. Lead	5
13. Magnesium	5000
14. Manganese	15
15. Mercury	0.2
16. Nickel	40
17. Potassium	5000
18. Selenium	5
19. Silver	10
20. Sodium	5000
21. Thallium	10
22. Vanadium	50
23. Zinc	20
24. Cyanide	10

SUPERFUND-CLP Inorganics  
(continued)

- 1: Any analytical method specified in Exhibit D, CLP-Inorganics may be utilized as long as the documented instrument or method detection limits meet the Contract Required Quantitation Level (CRQL) requirements. Higher quantitation levels may only be used in the following circumstance:

If the sample concentration exceeds two times the quantitation limit of the instrument or method in use, the value may be reported even though the instrument or method detection limit may not equal the contract required quantitation level. This is illustrated in the example below:

For lead:

Method in use = ICP

Instrument Detection Limit (IDL) = 40

Sample concentration = 85

Contract Required Quantitation Level (CRQL) = 5

The value of 85 may be reported even though instrument detection limit is greater than Contract Required Quantitation Limit. The instrument or method detection limit must be documented as described in Exhibit E.

- 2: These CRQL are the instrument detection limits obtained in pure water that must be met using the procedure in Exhibit E. The quantitation limits for samples may be considerably higher depending on the sample matrix.

**TABLE 2**  
**SAMPLE PRESERVATION AND ANALYTICAL METHODS**

PARAMETER	PRESERVATIVE	HOLDING TIME	USEPA METHOD
Total Arsenic	HNO <sub>3</sub> to pH < 2 Cool to 4°C	6 months	7060
Total Chromium	HNO <sub>3</sub> to pH < 2 Cool to 4°C	6 months	6010 or 7191
Total Lead	HNO <sub>3</sub> to pH < 2 Cool to 4°C	6 months	7421
Total Mercury	HNO <sub>3</sub> to pH < 2 Cool to 4°C	28 days	7470
Total Nickel	HNO <sub>3</sub> to pH < 2 Cool to 4°C	6 months	6010 or 7520
Total Zinc	HNO <sub>3</sub> to pH < 2 Cool to 4°C	6 months	6010 or 7950
Cyanide	NaOH to pH > 12 Cool to 4°C	14 days	9010
PCBs	Cool to 4°C	7 days to extraction	8080
Volatile Organics plus Carbon Disulfide	HCl to pH < 2 Cool to 4°C	14 days	8240
Semi-Volatiles	Cool to 4°C	7 days to extraction	8270

COMPONENTS REQUIRED FOR RCRA ANALYTICAL DATA SUBMITTED TO  
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION\*

A Report Narrative should accompany each submission, summarizing the contents, data and QA/QC results and all relevant circumstances of the work.

- A. Parameter requested.
- B. Sample Number or Numbers, Matrix, and:
  - 1. Date and time collected;
  - 2. Date extracted and/or digested;
  - 3. Date and time analyzed; and
  - 4. Chain of custody report and/or form, including confirmation of unbroken chain of custody, intact sample packaging and container seals and adequate temperature and/or other preservation.
- C. Results <sup>b,e,f,</sup>
  - 1. Sample Results;
  - 2. Duplicate;
  - 3. Blanks<sup>a</sup>;
  - 4. Matrix Spike; matrix spike duplicate; blank spike; and
  - 5. Surrogate recoveries, if applicable.
- D. Supporting QA/QC<sup>b</sup>
  - 1. Methodology;
  - 2. Method detection limits, instrument detection limits<sup>c</sup>;
  - 3. Linear curves<sup>d</sup>;
  - 4. Percent solids for soils, sludges, sediments, and where otherwise applicable;
  - 5. Calculations<sup>d</sup>;
  - 6. Cleanup procedures;
  - 7. Data validation procedures, results, and completed data validation checklists; and
  - 8. Documentation which illustrates how blank water is determined to be analyte-free.

In addition to submitting the above, all sample data and its QA/QC data as specified in SW-846, 3rd edition, Chapter 1, must be maintained accessible to NYSDEC either in hard copy or on magnetic tape or disk (computer data files). The data, if requested by NYSDEC, should be formatted as described in SW-846, 3rd edition, Chapter 1. This requirement may be changed in the future to mandate computer data files, accessible to NYSDEC on request.

This does not obviate the requirement to do the QA/QC specified in each individual EPA-approved method.

- \* Components for RCRA submissions for non-Contract Lab Protocols (CLP).  
If CLP, then CLP deliverables are required, unless otherwise stated in the approved plan.
- a The data should include all blanks (trip, equipment rinse, method and instrument blanks) as specified in the sampling and analysis plan, guidance and regulation.
- b Supporting QA/QC should be specific to the RCRA samples analyzed.
- c Every effort practicable must be made to achieve detection limits below regulatory limits and comparable to or better than the Practical Quantification Limits specified in the EPA-approved methods. In no case, will reporting limits above the specified PQL's be accepted without extensive and complete documentation to the Department.
- d These may not need to be submitted if adequate QA/QC summaries validating the data, including calibration control charts, correlation coefficients, etc., are submitted. The Report Narrative should describe the data validation and explain discrepancies. The supporting data should be provided to NYSDEC upon request, without restriction. Calibration data must include date and time of analysis.
- e Frequencies of blanks, duplicates, spikes, surrogates, calibrations, standard reference materials, etc., should be as stated in the approved sampling and analysis plan, the approved analytical methods and the SW-846 3rd edition, Chapter 1, requirements. If there are any perceived conflicts, these should be resolved with NYSDEC in advance of sampling.
- f Spiking for metals, organics or other parameters must be done before sample preparation (i.e. before digestions, extractions etc.) unless otherwise stated in the approved plan. Furnace analysis for metals will still require post-digestion spikes on all samples analyzed by this technique.



5R

New York State Department of Environmental Conservation  
50 Wolf Road, Albany, New York 12233

August 24, 1992

Mr. William E. Kochem, Jr.  
Supervisor, Plant Engineering  
Inland Fisher Guide Division  
~~General Motors Corporation~~  
1000 Town Line Road  
Syracuse, NY 13221

CA 92-08/24/92

Dear Mr. Kochem:

Re: Revised Surface Impoundment  
Groundwater Monitoring Plan  
NYD002239440

The New York State Department of Environmental Conservation has reviewed the above-referenced plan, received March 24, 1992.

Some of the previously agreed-to changes were not included in this revision of the Plan. These deficiencies are included in the enclosed comments. Also included in these comments are several items taken from EPA checklists, and wording clarifications to help avoid confusion in the future. A corrected version of the Plan is due to the Department within 45 days of the date of this letter.

If you have any questions during the revision process, please contact Ms. Luanne F. Whitbeck, of my staff, for technical assistance at (518) 457-9255. It may be useful to arrange a meeting to discuss the revisions prior to submitting it to the Department.

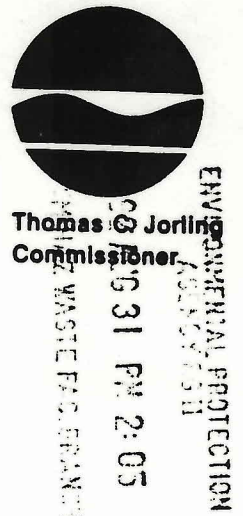
Sincerely,



Paul R. Counterman, P.E.  
Director  
Bureau of Haz. Waste Facility Mgmt.  
Division of Haz. Substances Regulation

Encl.

cc: E. Miles  
L. Whitbeck  
P. Patel  
J. Petiet  
J. Desai  
S. Eidt, Reg. 7  
G. Meyer, USEPA Reg. II  
A. Bellina, USEPA Reg. II  
M. Infurna, USEPA Reg. II  
J. Tomik, O'Brien & Gere





NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
DIVISION OF HAZARDOUS SUBSTANCES REGULATION  
ENGINEERING GEOLOGY SECTION

COMMENTS ON  
THE GMC INLAND FISHER GUIDE DIVISION  
POST CLOSURE GROUNDWATER MONITORING PLAN

April 1988 (Updated March 1992)

2.02 New Monitoring Well specifications

In the last sentence, the reference to Appendix C should be changed to Appendix B.

2.03 Analytical Requirements

3. Change the third sentence to read, ". . . volatile organics, and the following total metals: arsenic, lead, mercury, nickel, zinc, chromium. . ."

2.04 Monitoring Frequency

Add text indicating that the quarterly monitoring events will be as equally spaced as possible throughout the year to provide seasonality. Statistical comparisons shall be performed on each new quarter of data for all RCRA wells. The purpose of these statistical comparisons is to determine if the impoundments have had an impact on the groundwater. (See March 29, 1989 letter and page 8 of attachments).

3.01 Post-Closure Groundwater Sample Collection

In Paragraph 1, add text indicating that if the groundwater elevation for MW-3D is low and causes the flow lines to deviate from a NE direction, the Department is to be verbally notified within 7 days of the sampling event (see April 23, 1992 letter).

In Paragraph 1, add text to the third sentence indicating that the total well depth is also measured.

In Paragraph 1, change the fourth sentence to indicate that, at a minimum, the water level is to be obtained immediately before sampling after sufficient recovery, not immediately following well evacuation.

In Paragraph 1, the fifth sentence, change "contact" to "content."

In Paragraph 2, the first sentence, define "sufficient."

In Paragraph 2, add text after the first sentence indicating that the wells will be sampled for volatiles within 3 hours of purging, and the remainder of the samples collected by the end of the day.

In Paragraph 2, change the fourth sentence to indicate that the LNAPL will be sampled and analyzed for volatiles, PCBs and semi-volatiles (see April 16, 1991 letter). If insufficient LNAPL is available, containers are to be filled for analysis in the following order until LNAPL is depleted: volatiles, PCBs, and semi-volatiles. PCBs and semi-volatiles can be collected in a single one-liter container.

Add text indicating that wells will be checked for DNAPL and sampled if found (for the same parameters as the LNAPL). Delete the references to total petroleum hydrocarbons (TPHs).

### 3.02 Sample Preservation and Shipment

A new Table 2 is attached indicating the correct analytical methods for the RCRA program.

In the fourth sentence, the phrase "priority pollutant total metals" should be changed to reflect those metals that are sampled and analyzed for the current program.

Change the fifth sentence to read, ". . . reported to the NYSDEC; however, only the total metal analytical results are used for comparison to background and the groundwater standards."

The sixth sentence is to be changed to read, "All samples collected for metal analyses (both filtered and unfiltered), will be preserved to a pH of <2 in the field (see March 29, 1989 letter, page 8 attachments).

The preservation method for cyanide (NaOH to pH>12) is to be discussed in this section.

If the VOAs are to be preserved with HCl (as stated in Appendix E) the method is also to be discussed in this section.

### 3.03 Analytical Procedures

Revise Table 3 to show the detection limits for all parameters in the program, not just metals (see attached Table 4).

### 4.02 Groundwater Quality Assessment

As agreed in your March 29, 1989 letter, these paragraphs were to be included:

"The quarterly analyses will be statistically compared to the baseline groundwater quality data to evaluate if there has been a statistically significant increase in the concentrations of the indicator parameters since the surface impoundment closure. The statistical method selected will be based on the results of the accelerated monitoring program and approved by the NYSDEC.

If a statistically significant increase is found, GMC Fisher Guide shall follow 6NYCRR Part 373-3.6(d)(3) - (5) and perform a Groundwater Quality Assessment Investigation."

These paragraphs were not included, nor were the statistical methods submitted to the Department for review and approval. Include text explaining each method and why it is appropriate for use on Fisher Guide's data.

Delete all references to statistics performed on data which was generated using the higher detection limits. Only statistics performed on data using the lower detection limits are to be included and used for evaluations.

Paragraph 1 - Please provide the calculations performed on the PCB data which indicated that they are not normally distributed. Provide the calculations showing that the transformed data is also not normally distributed. If the transformed data is not normally distributed, clarify why a non-parametric test was not run on the data. Perform an appropriate test on the data (see EPA PB89-151047-Statistical Analysis of Groundwater Monitoring at RCRA Facilities - Interim Final Guidance).

Paragraph 2 - Recalculate the tolerance intervals for the inorganics using only those data detected, and those non-detects at the appropriate detection limits. Combine all useable data for this procedure. Do not use filtered metals to calculate tolerance limits.

Paragraph 2 - The summary tables referenced are to be revised to include only the statistics performed on data utilizing the lower detection limits.

#### 4.03 Report Submittals

The quarterly reports are now to be submitted in addition to the Annual Report.

The following items are to be added to the list of Annual Report deliverables:

- Calculated (or measured) rate and extent of migration of hazardous waste or hazardous waste constituents during

the reporting period. This is to include vertical and horizontal gradients.

- A listing of hazardous constituents detected at the MDL from the Appendix 33 sampling.
- Recommendations for performing a Groundwater Quality Assessment Investigation if a statistically significant increase is found.

## TABLE 2

### SAMPLE PRESERVATION AND ANALYTICAL METHODS

Replace Table 2 in the Plan with the attached Table 2.

## APPENDIX E

### GROUNDWATER SAMPLING AND CHAIN OF CUSTODY PROCEDURES

#### Sampling Procedures

Inland Fisher Guide is to specify which wells will be bailed and which will be pumped during purging and sampling. The preferred method for sampling the wells is bailing, not pumping. Indicate the type of bailer, and whether the bailers are dedicated to the wells, cleaned and dedicated to the site, or provided by O'Brien & Gere for each sampling event. The method approved in the Sampling and Analysis Plan is to be followed until another method is approved in writing.

If Fisher Guide were to purchase dedicated bailers for each well, the cost savings could be recovered within two sampling events. Teflon bailers would enable the sampler to see LNAPL or DNAPL in the sample and are lighter in weight. The bailer could be hung in the well and would not need to be decontaminated between events, unless visually dirty. The equipment blank would no longer be needed because the on-site decontamination of the equipment would no longer be necessary. This would also save a great deal of time and the sampling could be completed in one day.

Provide detailed operating, calibration and maintenance procedures for the pH meter, specific conductivity meters, and the turbidometer.

Provide maintenance schedules for the equipment, and decision criteria for repair or replacement of equipment.

**Materials**

Add the turbidometer to this list.

Provide model names and numbers for equipment.

Provide a table listing the sampling containers needed for each event.

Monofilament is more appropriate to use than polypropylene rope. The potential exists for small fragments to be rubbed off the rope during purging and sampling. These fragments in a sample may cause erroneous analytical results.

Modify the list to indicate that acetone, methanol and nitric acid are used to clean the bailers, not acetone or hexane, as listed in #6.

Please clarify what the peristaltic pump with the in-line 0.45 micron particulate filter is used for. A peristaltic pump is one of the least desirable methods for groundwater sampling.

**Sampling Procedures (BAILER)****Paragraph 1**

- (d) Add the following text: ' All wells will be purged and sampled the same day.

**Paragraph 2**

- Add in #4 from Pump Procedures.
- 4. Provide the procedures for measuring total well depth and depth to water. Note in the procedure that the depth to water will be measured to 0.01 foot. Add in text from Pump Procedures, #5.
- 10. See second comment for 3.01 Post-Closure Groundwater Sample Collection regarding NAPL sampling parameters.  
Add in text indicating that the well will also be checked for DNAPL, and sampled if detected.
- 13. Add in after the second sentence: Wells that are slow to recover will be purged first. This will insure that sufficient recovery has occurred by the end of the day for sampling.
- 16. Change the eighth sentence to read, ". . . samples for soluble metals analysis. . ." Add text indicating that the sample for total metal analysis will be preserved to a pH of <2.

18. Delete the phrase, "and if required."
20. Add in the footnotes to the cleaning procedure.

Sampling Procedures (PUMP)

8. Add in #8 from BAILER procedures.
10. See second comment for 3.01 Post-Closure Groundwater Sample Collection regarding NAPL sampling parameters.
12. Clarify why bailing is done from the bottom up, and the pumping is from the top of the water column only.
13. Change the sentence referencing purgeable priority pollutants to reference the 40 ml VOA containers (as in #14 from BAILER procedures).
14. The cleaning procedures for the submersible pump are to be the same as those for the bailers (see #20 from BAILER PROCEDURES). The tubing must be dedicated to the individual wells. See the RCRA QAPjP, Appendix E, I(D)(1).
16. This text should be replaced with the text from #16, BAILER procedures.
18. Delete the phrase, "and if required."
20. Add in the footnotes to the cleaning procedures.



**TABLE 2**  
**SAMPLE PRESERVATION AND ANALYTICAL METHODS**

PARAMETER	PRESERVATIVE	HOLDING TIME	USEPA METHOD
Total Arsenic	HNO <sub>3</sub> to pH < 2 Cool to 4°C	6 months	7060
Total Chromium	HNO <sub>3</sub> to pH < 2 Cool to 4°C	6 months	6010 or 7191
Total Lead	HNO <sub>3</sub> to pH < 2 Cool to 4°C	6 months	7421
Total Mercury	HNO <sub>3</sub> to pH < 2 Cool to 4°C	28 days	7470
Total Nickel	HNO <sub>3</sub> to pH < 2 Cool to 4°C	6 months	6010 or 7520
Total Zinc	HNO <sub>3</sub> to pH < 2 Cool to 4°C	6 months	6010 or 7950
Cyanide	NaOH to pH > 12 Cool to 4°C	14 days	9010
PCBs	Cool to 4°C	7 days to extraction	8080
Volatile Organics plus Carbon Disulfide	HCl to pH < 2 Cool to 4°C	14 days	8240
Semi-Volatiles	Cool to 4°C	7 days to extraction	8270



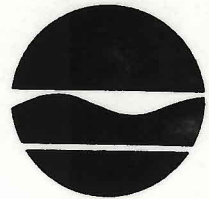
NYD 002239440

CA92-04/23/92

APR 28 REC'D

New York State Department of Environmental Conservation  
50 Wolf Road, Albany, New York 12233

April 23, 1992



Thomas C. Jorling  
Commissioner

William E. Kochem, Jr.  
Supervisor, Plant Engineering  
Inland Fisher Guide Division  
General Motors Corporation  
1000 Town Line Road  
Syracuse, NY 13221

*[Handwritten initials: ED and CA]*

Dear Mr. Kochem:

Re: 1991 Comprehensive Groundwater  
Monitoring Evaluation Report

The New York State Department of Environmental Conservation has reviewed your February 27, 1992 response to Department comments on the above-referenced Report. Your response has adequately addressed the issues.

The review of the groundwater elevation data for monitoring well MW-3D indicated inconsistent readings for August 12, 1991 and September 24, 1991. Should similar lower water level elevations be measured in any future sampling event, Fisher Guide is to verbally notify Ms. Luanne F. Whitbeck, of my staff, within seven days of the sampling event. (Please note this addition in your Sampling and Analysis Plan.) A meeting will then be set up to determine what course of action needs to be taken. If the lower water level elevations are an accurate representation of the water table at your facility, the issue of upgradient vs. downgradient in relationship to the compliance point well need to be addressed.

If you have any questions, please contact Ms. Whitbeck at (518) 457-9255.

Sincerely,

*Paul R. Counterman*

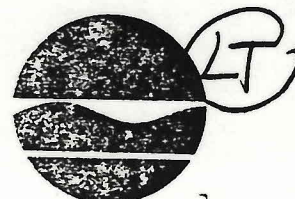
Paul R. Counterman, P.E.  
Director  
Bureau of Haz. Waste Facility Mgmt.  
Division of Haz. Substances Regulation

cc: J. Tomik, O'Brien & Gere  
J. Moore, O'Brien & Gere  
S. Eidt, Reg. 7  
E. Miles  
L. Whitbeck  
S. Kaminski  
A. Patel  
J. Desai  
G. Meyer, USEPA Reg. II  
A. Bellina, USEPA Reg. II

New York State Department of Environmental Conservation  
50 Wolf Road, Albany, New York 12233

CA 92 - 02/05/92

February 5, 1992



Thomas C. Jorling  
Commissioner

Mr. William E. Kochem, Jr.  
Supervisor - Plant Engineering  
Inland Fisher Guide Division  
General Motors Corporation  
1000 Town Line Road  
Syracuse, NY 13221

Dear Mr. Kochem:

Re: Comprehensive Groundwater Monitoring  
Evaluation Report - NYD002239440  
November 1991

The New York State Department of Environmental Conservation has reviewed your December 20, 1991 response to deficiencies listed in the above-referenced document.

As discussed during the February 4, 1992 telephone conversation between you and Ms. Luanne F. Whitbeck, of my staff, your response contained many inaccuracies regarding the content of the current Sampling and Analysis Plan.

The Sampling and Analysis Plan (dated April 26, 1988) is to be updated using the Closure Plan addendum comments (March 29, 1989), the addendum modification (March 21, 1989), and the letters for the 1989 and 1990 Groundwater Annual Reports. The updated Plan, in one complete volume, is due to the Department by March 2, 1992. Upon Department approval, the updated Sampling and Analysis Plan must be followed during all future groundwater monitoring events.

The information in the Department's files for the September sampling event is inconsistent with previous data. To clarify these inconsistencies, please provide the following information for all RCRA wells:

- a table with the top of casing elevations, the ground surface elevations, and the total well depths (as installed).
- a table with the prepurge depths to water, the groundwater elevations, and the total well depths as measured in the field on September 24 and 25, 1991.

- a potentiometric contour map utilizing the September data for both the shallow and the deep wells.

The tables and potentiometric contour map are due to the Department by March 2, 1992.

If inclement weather affects the scheduled painting and labeling of the monitoring wells, this work may be postponed until the second quarter of 1992. Please notify the Department in writing upon completion of this work.

Failure to comply with the above issues may result in enforcement proceedings under the Environmental Conservation Law. If you have any questions, please contact Ms. Whitbeck at (518) 457-9255.

Sincerely,



Paul R. Counterman, P.E.  
Director  
Bureau of Haz. Waste Facility Mgmt.  
Division of Haz. Substances Regulation

cc: J. Tomik - O'Brien & Gere  
S. Eidt - RHSE, Reg. 7  
E. Miles  
L. Whitbeck  
S. Kaminski  
P. Patel  
J. Desai,  
G. Meyer, USEPA Reg. II  
A. Bellina, USEPA Reg. II



NYD 002239440

CA 91 - 12/12/91

December 12, 1991

Re: R02-01-07, GMC Fisher Guide,  
Syracuse, New York

Jim,

As per our discussion, you indicated that you will do the evaluation for R02-01-07 since the WAM is no longer in your section.

Enclosed please find a copy of the past performance evaluation for the subject project and a copy of the latest financial report. This project was previously evaluated for a total of 100 hours. The financial report shows that this project has accrued a total of 233.44 hours to date. Therefore, since the past performance was evaluated based upon 100 hours, there is still a remainder of 133 hours that needs to be evaluated prior to closing this project.

Thank you for taking the time to do the evaluation. If you have any questions or need further information my extension is 4-6599.

Jane

PERFORMANCE EVALUATION FORM

Contract Number: RCRA-E CONTR

☐ EPA Monitor

Category of Work: SAMPLE  
(10 Contract SOW Tasks)

☐ Contractor Monitor

☐ Consensus

DESCRIPTION OF WORK  
W/A: RFAS

CONTRACTOR AND RESPONSIBLE SUBS:  
ATK DPRA

ASSIGNMENT HOURS EVALUATION PERIOD  
NUMBER EVALUATED PER FROM TO  
R02-01-07 133 8 08/01/91-11/30/91

SIGNATURES:  
CONTRACTOR:

MILESTONES EVALUATED:  
GMC FISHER GUIDE

HPO/RPO:

EPA MONITOR: *Luis Negrón* *Marwan Faruk*

CRITERIA	RATING *	RATING JUSTIFICATION
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TECHNICAL QUALITY		
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SCHEDULE CONFORMITY		
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BUDGET CONFORMITY		
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MANAGEMENT		
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EDITORIAL QUALITY		
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*Rating	Adjective	Criterion	Rating	X	Weight	=	Total	Was Contractor Notified?
5 = Outstanding		Technical	X		0.4	=	0.00	<input type="checkbox"/> Yes <input type="checkbox"/> No By Whom? When?
4 = Exceeds Expectation		Schedule	X		0.2	=	0.00	
3 = Satisfactory		Budget	X		0.2	=	0.00	
2 = Marginal		Management	X		0.1	=	0.00	
1 = Unsatisfactory		Editorial	X		0.1	=	0.00	
Overall Project Rating							0.00	

Revised 8/22/89

## Elements for Rating Each Criterion

### TECHNICAL QUALITY

The contractor is expected to perform all work assignments in a competent and professional manner. This criterion relates to the manner in which the task is approached as well as to its ultimate disposition. The following elements will be considered in evaluating technical quality:

- 1) Appropriateness of technical approach.
- 2) Clarity and completeness of work plans.
- 3) Organization and utility of interim and final products in relation to final objectives of work assignment.
- 4) Substantiation of assumptions and calculations.
- 5) Appropriateness of assigned contractor personnel to accomplishment of work assignment objectives.
- 6) Flexibility and quality of performance in "emergency" situations or in an environment of fluctuating priorities.
- 7) Consistency in and ability to analyze and resolve technical issues.
- 8) Demonstrated understanding of regulatory environment, procedural requirements and effective utilization of guidance materials and technical resource documents.

### COMPLIANCE WITH SCHEDULE

This criterion addresses the contractor's ability to deliver products on time and implement all aspects of the project in a timely manner. The following elements illustrate this criterion:

- 1) Delivery of intermediate and final products on schedule.
- 2) Minimization of the displacement of other ongoing projects to accommodate critical work assignments. Effectiveness of communications to EPA regarding 1) the impacts that new assignments will have on meeting deadlines for ongoing work and 2) any other schedule slippages.
- 3) Timeliness of submission of support data and administrative documents, such as progress, financial, and performance event reports.
- 4) Assignments completed on schedule if quick turnaround or ahead of schedule if not.
- 5) Adherence to established work priorities.

### COMPLIANCE WITH BUDGET

This criterion reflects the Contractor's ability to deliver products and services at represented cost and to the most cost-effective means of accomplishing a given assignment. The following illustrate this criterion:

- 1) Budget maintenance (hours and dollars), i.e., extent to which approved work plan hour and dollar approved amounts are adhered to.
- 2) Adherence to the hourly rates bid in the Contractor's best-and-final offer.
- 3) Cost management of subcontractors.
- 4) Cost minimization, i.e., development of creative approaches to problem solving, use of existing information and other resources to minimize overall cost to the Agency for the accomplishment of work assignment objectives.

### MANAGEMENT

This criterion relates to the Contractor's oversight and control over all projects, including the balancing of priorities, proper staffing of work assignments, maximization of resources, etc. The following elements illustrate this criterion:

- 1) Utilization and control of resources, both at the prime and subcontractor level.
- 2) Effectiveness of quality assurance procedures and data review.
- 3) Coordination and communication with the Project Officer, Work Assignment Manager and Contracting Officer.

### EDITORIAL QUALITY

This criterion addresses the contractor's ability to deliver products that meet the needs of EPA in terms of their technical writing, organization, presentation and freedom from errors. The following elements illustrate this criterion:

- 1), Quality of technical writing and organization of the deliverable.
- 2) Quality of the deliverable in terms of neatness and cleanness.
- 3) Degree of freedom from typographical, spelling and grammatical errors.



# BASIS FOR PERFORMANCE EVALUATION

Attachment 3

EPA Criteria	Outstanding 5.0	Exceeds Expectations 4.0	Satisfactory 3.0	Marginal 2.0	Unsatisfactory 1.0
Technical quality (see attachment for elements to be con- sidered)	Contractor's perfor- mance significantly exceeded expecta- tions and objectives by demonstrating innovative technical methodology to accomplish EPA's goals in all 8 elements	Contractor's perfor- mance exceeded expectations in all of the 8 elements	Contractor's perfor- mance satisfactorily met EPA's expecta- tions, as set forth on the latest Work Plan in all 8 elements.	Contractor did not satisfactorily meet EPA's expectations, as set forth in the latest Work Plan in all 8 elements	Contractor performed in manner that did not satisfy EPA needs. Lack of technical competence in meeting EPA's expectations in all 8 elements.
Compliance with schedule (See attach- ments for elements)	Contractor fully met the needs of EPA, as proposed in the lat- est Work Plan, in timely performance of work on the pro- ject, including submission of deliv- erables, and in communication on- time and difficult schedules. Or con- tractor came in ahead of schedule on normal projects through special effort which was of benefit to EPA.	Contractor exceeded expectation by delivery of project ahead of schedule proposed in Work Plan, including communication on schedules.	Contractor met needs of EPA, as proposed in the latest Work Plan, including changes in schedule requested by con- tractor and agreed to by EPA.	Contractor missed schedules, as pro- posed in the latest Work Plan, without advanced communica- tion and approval from EPA, for intermediate and/or final products. Delay may or may not adversely affect EPA commitments.	Contractor signifi- cantly deficient, missing delivery schedules that were critical to EPA or by substantial margins without prior notification and approval by EPA.
Conformity to Budget (See Attachment for elements)	Contractor adhered to latest approved Work Plan estimated cost.	Contractor did not exceed by more than 5% or come in more than 5% under latest approved Work Plan estimated cost.	Contractor did not exceed by more than 10% or come in more than 10% under latest approved Work Plan estimated cost.	Contractor exceeded latest approved Work Plan estimated cost less than 15% or came in more than 15%.	Contractor exceeded latest approved Work Plan estimated cost by more than 15% or came in more than 20% under budget.

EPA Criteria	Outstanding 5.0	Exceeds Expectations 4.0	Satisfactory 3.0	Marginal 2.0	Unsatisfactory 1.0
Management (See Attachment for Elements)	Contractor's manage- ment of Project significantly exceeded the expectations and objectives of the 3 elements.	Contractor's manage- ment of project exceeded the expectations and objectives of the 3 elements.	Contractor's manage- ment of project satisfactorily met the needs of EPA, as set forth in the latest Work Plan, in all 3 elements.	Contractor provided written deliverables that were inadequate in all 3 elements.	Contractor's management signi- ficantly deficient in all three elements.
Editorial quality (See Attachment for Elements)	Contractor provided written deliverables that were innovative in presentation, format and organi- zation which significantly exceed EPA's expec- tations.	Contractor provided written deliverables that were innovative in presentation format and organi- zation which exceeded EPA's expectations.	Contractor provided written deliverables which addressed all 3 elements satis- factorily.	The Contractor provided written deliverables that did not adequately meet the needs of EPA and did not address all 3 ele- ments which resulted in need for correc- tions.	Contractor provided written deliverables that did not meet the needs of EPA, and required a substantial effort to correct.

☒ EPA Monitor  
☐ Contractor Monitor

Category of Work  
 (10 Contract SOW Tasks)

WORK ASSIGNMENT TITLE <b>Part B Permit Application</b>				Contractor		
Assignment No.		Hours Eval.	Evaluation Period		Subcontractor(s)	
R02-01-07		100 <del>219</del>	from 12/01/90	to 3/31/91	DPRA	
Milestones Evaluated					Signatures:	
Review / Revised Sampling and Analysis Plan					Contractor ATH	
					HPO/RPO	
					EPA Monitor/WAM M. Faruk	
Performance Criteria		Rating*	Rating Justification			
(a) Technical Quality 40%		3	Revised Sampling and analysis plan technical quality is as expected by EPA.			
(b) Conformity to Schedule 20%		3	Plan was submitted on schedule as requested by EPA.			
(c) Conformity to Budget 20%		3	Contractor exceeded budget by less than 10%.			
(d) Management 10%		3	The Management of the project met EPA needs.			
(e) Editorial Quality 10%		3	Deliverable are acceptable			
*Rating	Adjective	Criterion	Rating	x	Weight = Total	Was Contractor Notified?
5	= Outstanding	Technical	3	x	0.4 = 1.2	<input type="checkbox"/> Yes <input type="checkbox"/> No
4	= Exceeds Expectations	Schedule	3	x	0.2 = 0.6	
3	= Satisfactory	Budget	3	x	0.2 = 0.6	
2	= Marginal	Management	3	x	0.1 = 0.3	
1	= Unsatisfactory	Editorial	3	x	0.1 = 0.3	
						By Whom? _____
						When? _____

REVISED 8/22/89

Return by 4/24/91.



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Budgeted		Current					Project to Date					Remaining Balance	
Hours	Total Cost	Hours	Labor Cost	Travel	Other	Total Cost	Hours	Labor Cost	Travel	Other	Total Cost	Hours	Cost
REGION II													
Work Assignment: R02-01													
Project													
01	310.00 \$ 15865.00	0.00 \$	0.00 \$	0.00 \$	0.00 \$	0.00	288.00 \$	12768.89 \$	0.00 \$	1635.26 \$	14404.15	22.00 \$	1460.85
02	370.00 \$ 22695.00	0.00 \$	0.00 \$	0.00 \$	0.00 \$	0.00	369.00 \$	19940.01 \$	0.00 \$	2386.69 \$	22326.70	1.00 \$	368.30
03	509.00 \$ 35886.00	0.00 \$	0.00 \$	0.00 \$	0.00 \$	0.00	647.00 \$	29214.28 \$	0.00 \$	6069.94 \$	35284.22	-138.00 \$	601.78
04	103.00 \$ 9230.00	0.00 \$	0.00 \$	0.00 \$	0.00 \$	0.00	81.50 \$	6942.66 \$	0.00 \$	1536.38 \$	8479.04	21.50 \$	750.96
05	696.00 \$ 39554.00	0.00 \$	0.00 \$	0.00 \$	0.00 \$	0.00	690.50 \$	33263.31 \$	0.00 \$	5241.83 \$	38505.14	5.50 \$	1048.86
06	877.00 \$ 42865.00	0.00 \$	0.00 \$	0.00 \$	0.00 \$	0.00	793.34 \$	23767.76 \$	3610.58 \$	9064.86 \$	36443.20	83.66 \$	6421.80
07	301.00 \$ 14608.00	0.00 \$	0.00 \$	0.00 \$	0.00 \$	0.00	233.44 \$	9081.87 \$	323.02 \$	2013.12 \$	11418.01	67.56 \$	3189.99
08	77.00 \$ 3979.00	0.00 \$	0.00 \$	0.00 \$	0.00 \$	0.00	94.00 \$	4393.35 \$	0.00 \$	683.67 \$	5077.02	-17.00 \$	-1098.02
09	896.00 \$ 62126.00	0.00 \$	0.00 \$	0.00 \$	0.00 \$	0.00	836.69 \$	42353.47 \$	5991.56 \$	8795.24 \$	57140.27	59.31 \$	4985.73
Total of Projects in Work Assignment: R02-01													
	4139.00 \$ 246808.00	0.00 \$	0.00 \$	0.00 \$	0.00 \$	0.00	4033.47 \$	181725.60 \$	9925.16 \$	37426.99 \$	229077.75	105.53 \$	17730.25

Work Assignment Budget:  
4737.00 \$ 229184.00  
Budget Available for Additional Projects:  
598.00 \$ -17624.00

Work Assignment: R02-02

Project													
01 A	1326.00 \$ 69238.00	Rev 15 11.00 \$	297.48 \$	0.00 \$	20.06 \$	317.54	1217.50 \$	48150.31 \$	1537.18 \$	14236.50 \$	63923.99	108.50 \$	5314.01
02 A	1015.00 \$ 55129.00	Rev 16 17.00 \$	464.27 \$	0.00 \$	31.13 \$	495.40	940.75 \$	39277.56 \$	111.09 \$	11183.56 \$	50572.21	74.25 \$	4556.79
Total of Projects in Work Assignment: R02-02													
	2341.00 \$ 124367.00	28.00 \$	761.75 \$	0.00 \$	51.19 \$	812.94	2158.25 \$	87427.87 \$	1648.27 \$	25420.06 \$	114496.20	182.75 \$	9870.80

Work Assignment Budget:  
2439.00 \$ 111963.00  
Budget Available for Additional Projects:  
98.00 \$ -12404.00

Will be done by March 1993  
Per Jerry Allen

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Hours	Total Cost	Hours	Labor Cost	Travel	Other	Total Cost	Hours	Labor Cost	Travel	Other	Total Cost	Hours	Cost
REGION II													
Work Assignment: R02-03													
Project													
01 A	572.00 \$	39663.00	Rev.0 0.00 \$	0.00 \$	0.00 \$	0.00 \$	0.00 \$	0.00 \$	0.00 \$	0.00 \$	0.00 \$	0.00 \$	0.00 \$
02 A	490.00 \$	31838.00	Rev.1 3.50 \$	84.57 \$	0.00 \$	6.08 \$	90.65	260.75 \$	12214.09 \$	190.84 \$	2560.24 \$	14965.17	229.25 \$
03 A	456.00 \$	29692.00	Rev.1 1.00 \$	17.53 \$	0.00 \$	1.54 \$	19.07	240.00 \$	11404.42 \$	190.84 \$	1751.41 \$	13346.67	216.00 \$
04 A	390.00 \$	29191.00	Rev.2 32.25 \$	3161.39 \$	0.00 \$	179.79 \$	3341.18	368.50 \$	23689.34 \$	693.98 \$	3190.50 \$	27573.82	21.50 \$
05 A	390.00 \$	29191.00	Rev.2 30.25 \$	2678.70 \$	0.00 \$	163.21 \$	2841.91	372.50 \$	24030.69 \$	1234.35 \$	2910.25 \$	28175.29	17.50 \$
Total of Projects in Work Assignment: R02-03													
	2298.00 \$	159575.00	67.00 \$	5942.19 \$	0.00 \$	350.62 \$	6292.81	1610.25 \$	90177.17 \$	4110.56 \$	12936.66 \$	107224.39	687.75 \$
Work Assignment Budget:													
	2300.00 \$	115000.00											
Budget Available for Additional Projects:													
	2.00 \$	-44575.00											

Work Assignment: R02-04

Project													
01	755.00 \$	57864.00	0.00 \$	0.00 \$	0.00 \$	1321.18 \$	1321.18	787.75 \$	39786.97 \$	3859.08 \$	14330.90 \$	57976.95	-32.75 \$
Total of Projects in Work Assignment: R02-04													
	755.00 \$	57864.00	0.00 \$	0.00 \$	0.00 \$	1321.18 \$	1321.18	787.75 \$	39786.97 \$	3859.08 \$	14330.90 \$	57976.95	-32.75 \$
Work Assignment Budget:													
	565.00 \$	44073.00											
Budget Available for Additional Projects:													
	-190.00 \$	-13791.00											

Work Assignment: R02-05

Project													
01 A	447.00 \$	31875.00	Rev.0 2.50 \$	43.83 \$	0.00 \$	6.37 \$	50.20	239.00 \$	14279.94 \$	834.35 \$	2117.28 \$	17231.57	208.00 \$
02 A	483.00 \$	32516.00	Rev.0 2.00 \$	35.06 \$	0.00 \$	5.10 \$	40.16	259.25 \$	15123.76 \$	834.44 \$	1800.59 \$	17758.79	223.75 \$

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Hours	Total Cost	Hours	Labor Cost	Travel	Other	Total Cost	Hours	Labor Cost	Travel	Other	Total Cost	Hours	Cost
REGION II													
Total of Projects in Work Assignment: R02-05													
930.00	\$ 64391.00	4.50	\$ 78.89	\$ 0.00	\$ 11.47	\$ 90.36	498.25	\$ 29403.70	\$ 1668.79	\$ 3917.87	\$ 34990.36	431.75	\$ 29400.64
=====													
Work Assignment Budget:													
800.00	\$ 40000.00												
Budget Available for Additional Projects:													
-130.00	\$ -24391.00												
Work Assignment: R02-06													
Project													
01	86.00 \$ 5454.00	0.00 \$	0.00 \$	0.00 \$	0.00 \$	0.00	98.00 \$	4952.15 \$	40.00 \$	1240.24 \$	6232.39	-12.00 \$	-778.39
02	888.00 \$ 57375.00	131.50 \$	8012.97 \$	0.00 \$	625.85 \$	8638.82	885.50 \$	50294.29 \$	178.38 \$	4709.79 \$	55182.46	2.50 \$	2192.54
=====													
Total of Projects in Work Assignment: R02-06													
974.00	\$ 62829.00	131.50	\$ 8012.97	\$ 0.00	\$ 625.85	\$ 8638.82	983.50	\$ 55246.44	\$ 218.38	\$ 5950.03	\$ 61414.85	-9.50	\$ 1414.15
=====													
Work Assignment Budget:													
1000.00	\$ 50217.00												
Budget Available for Additional Projects:													
26.00	\$ -12612.00												
Work Assignment: R02-07													
Project													
01	284.00 \$ 15614.00	0.00 \$	0.00 \$	0.00 \$	0.00 \$	0.00	315.94 \$	12920.19 \$	1050.61 \$	2919.49 \$	16890.29	-31.94 \$	-1276.29
02	432.00 \$ 28517.00	5.00 \$	315.39 \$	0.00 \$	19.58 \$	334.97	464.62 \$	23058.11 \$	3078.16 \$	4408.54 \$	30544.81	-32.62 \$	-2027.81
03	423.00 \$ 24445.00	0.00 \$	0.00 \$	0.00 \$	98.47 \$	98.47	498.62 \$	18507.57 \$	2393.86 \$	5551.24 \$	26452.67	-75.62 \$	-2007.67
04	536.00 \$ 34298.00	0.00 \$	0.00 \$	0.00 \$	0.00 \$	0.00	579.50 \$	29405.90 \$	2203.21 \$	4936.55 \$	36545.66	-43.50 \$	-2247.66

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	Hours	Total Cost	Hours	Labor Cost	Travel	Other	Total Cost	Hours	Labor Cost	Travel	Other	Total Cost	Hours	Cost
REGION II														
Total of Projects in Work Assignment: R02-07														
	1675.00	\$ 102874.00	5.00	\$ 315.39	\$ 0.00	\$ 118.05	\$ 433.44	1858.68	\$ 83891.77	\$ 8725.84	\$ 17815.82	\$ 110433.43	183.68	\$ -7559.43
Work Assignment Budget:														
	2200.00	\$ 110000.00												
Budget Available for Additional Projects:														
	525.00	\$ 7126.00												
Work Assignment: R02-08														
Project														
01	658.25	\$ 40000.76	0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	658.25	\$ 32176.72	\$ 1265.86	\$ 6558.18	\$ 40000.76	0.00	\$ 0.00
02	61.00	\$ 5166.00	44.50	\$ 2106.29	\$ 0.00	\$ 164.53	\$ 2270.82	44.50	\$ 2106.29	\$ 0.00	\$ 164.53	\$ 2270.82	16.50	\$ 2895.18
Total of Projects in Work Assignment: R02-08														
	719.25	\$ 45166.76	44.50	\$ 2106.29	\$ 0.00	\$ 164.53	\$ 2270.82	702.75	\$ 34283.01	\$ 1265.86	\$ 6722.71	\$ 42271.58	16.50	\$ 2895.18
Work Assignment Budget:														
	860.00	\$ 45166.00												
Budget Available for Additional Projects:														
	140.75	\$ -0.76												
Work Assignment: R02-09														
Project														
01	394.00	\$ 21573.00	0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	371.00	\$ 16520.26	\$ 355.28	\$ 4959.21	\$ 21834.75	23.00	\$ -261.75
02	364.00	\$ 19844.00	0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	338.00	\$ 15771.31	\$ 0.00	\$ 3810.94	\$ 19582.25	26.00	\$ 261.75



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	Budgeted		Current					Project to Date					Remaining Balance	
	Hours	Total Cost	Hours	Labor Cost	Travel	Other	Total Cost	Hours	Labor Cost	Travel	Other	Total Cost	Hours	Cost
REGION II														
Total of Projects in Work Assignment: R02-09	758.00	\$ 41417.00	0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	709.00	\$ 32291.57	\$ 355.28	\$ 8770.15	\$ 41417.00	49.00	\$ 0.00
Work Assignment Budget:	758.00	\$ 41417.00												
Budget Available for Additional Projects:	0.00	\$ 0.00												
Work Assignment: R02-10														
Project														
01	334.00	\$ 23085.00	2.00	\$ 126.16	\$ 0.00	\$ 5.80	\$ 131.96	333.75	\$ 17027.84	\$ 1872.22	\$ 3513.43	\$ 22413.49	0.25	\$ 671.51
02	423.00	\$ 24026.00	0.00	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00	411.50	\$ 17653.25	\$ 2166.61	\$ 6259.39	\$ 26079.25	11.50	\$ -2053.25
03	995.00	\$ 58581.00	0.00	\$ 0.00	\$ 0.00	\$ 762.24	\$ 762.24	1060.50	\$ 43712.81	\$ 7327.35	\$ 8005.72	\$ 59045.88	-65.50	\$ -464.88
Total of Projects in Work Assignment: R02-10	1752.00	\$ 105692.00	2.00	\$ 126.16	\$ 0.00	\$ 768.04	\$ 894.20	1805.75	\$ 78393.90	\$ 11366.18	\$ 17778.54	\$ 107538.62	-53.75	\$ -1846.62
Work Assignment Budget:	1856.00	\$ 105652.00												
Budget Available for Additional Projects:	104.00	\$ -40.00												
Work Assignment: R02-11														
Project														
01	102.00	\$ 6576.00	2.50	\$ 78.78	\$ 0.00	\$ 7.42	\$ 86.20	104.00	\$ 5770.37	\$ 0.00	\$ 915.83	\$ 6686.20	-2.00	\$ -110.20

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	Budgeted		Current					Project to Date					Remaining Balance	
	Hours	Total Cost	Hours	Labor Cost	Travel	Other	Total Cost	Hours	Labor Cost	Travel	Other	Total Cost	Hours	Cost
<b>REGION II</b>														
Total of Projects in Work Assignment:	R02-11													
	102.00 \$	6576.00	2.50 \$	78.78 \$	0.00 \$	7.42 \$	86.20	104.00 \$	5770.37 \$	0.00 \$	915.83 \$	6686.20	-2.00 \$	-110.20
Work Assignment Budget:														
	160.00 \$	10000.00												
Budget Available for Additional Projects:														
	58.00 \$	3424.00												
<b>Work Assignment: R02-12</b>														
Project 01	714.00 \$	37856.00	0.00 \$	0.00 \$	0.00 \$	0.00 \$	0.00	611.25 \$	27016.77 \$	1191.52 \$	5791.72 \$	34000.01	102.75 \$	3855.99
Total of Projects in Work Assignment:	R02-12													
	714.00 \$	37856.00	0.00 \$	0.00 \$	0.00 \$	0.00 \$	0.00	611.25 \$	27016.77 \$	1191.52 \$	5791.72 \$	34000.01	102.75 \$	3855.99
Work Assignment Budget:														
	680.00 \$	34000.00												
Budget Available for Additional Projects:														
	-34.00 \$	-3856.00												
<b>Work Assignment: R02-13</b>														
Project 01	457.00 \$	32925.00	2.00 \$	35.06 \$	0.00 \$	5.10 \$	40.16	237.25 \$	16400.38 \$	0.00 \$	2111.36 \$	18511.74	219.75 \$	14413.26
Total of Projects in Work Assignment:	R02-13													
	457.00 \$	32925.00	2.00 \$	35.06 \$	0.00 \$	5.10 \$	40.16	237.25 \$	16400.38 \$	0.00 \$	2111.36 \$	18511.74	219.75 \$	14413.26
Work Assignment Budget:														
	600.00 \$	30000.00												
Budget Available for Additional Projects:														
	143.00 \$	-2925.00												

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Budgeted		Current					Project to Date					Remaining Balance	
Hours	Total Cost	Hours	Labor Cost	Travel	Other	Total Cost	Hours	Labor Cost	Travel	Other	Total Cost	Hours	Cost
REGION II													
Work Assignment: R02-14													
Project													
01 A	492.00 \$ 38855.00	Rev 1	0.00 \$	0.00 \$	0.00 \$	182.88 \$	182.88	236.25 \$	15976.51 \$	160.74 \$	1340.53 \$	17477.78	255.75 \$ 21377.22
02 A	278.00 \$ 22486.00	Rev 1	0.00 \$	0.00 \$	0.00 \$	0.00 \$	0.00	268.00 \$	18827.28 \$	156.01 \$	1457.15 \$	20440.44	10.00 \$ 2045.56
03 A	382.00 \$ 29778.00	Rev 0	0.00 \$	0.00 \$	0.00 \$	0.00 \$	0.00	278.25 \$	18947.25 \$	1070.12 \$	1951.52 \$	21968.89	103.75 \$ 7809.11
Total of Projects in Work Assignment: R02-14													
	1152.00 \$ 91119.00		0.00 \$	0.00 \$	0.00 \$	182.88 \$	182.88	782.50 \$	53751.04 \$	1386.87 \$	4749.20 \$	59887.11	369.50 \$ 31231.89

Work Assignment Budget:  
1800.00 \$ 90000.00  
Budget Available for Additional Projects:  
648.00 \$ -1119.00

Work Assignment: R02-15

Project													
01 <del>Drop</del>	89.00 \$	Cancelled 7779.00	Rev 1	0.00 \$	0.00 \$	0.00 \$	0.00 \$	0.00	92.75 \$	6951.21 \$	0.00 \$	548.80 \$	7500.01 -3.75 \$ 278.99
Total of Projects in Work Assignment: R02-15													
	89.00 \$	7779.00		0.00 \$	0.00 \$	0.00 \$	0.00	92.75 \$	6951.21 \$	0.00 \$	548.80 \$	7500.01	-3.75 \$ 278.99

Work Assignment Budget:  
150.00 \$ 7500.00  
Budget Available for Additional Projects:  
61.00 \$ -279.00

Work Assignment: R02-16

Project													
01 A	552.00 \$	40635.00	Rev 1	1.00 \$	29.89 \$	0.00 \$	129.82 \$	159.71	516.02 \$	28762.00 \$	774.98 \$	3557.41 \$	33094.39 35.98 \$ 7540.61
02 A	440.00 \$	30448.00	Rev 2	90.50 \$	5161.46 \$	0.00 \$	344.65 \$	5506.11	466.23 \$	25582.23 \$	2929.38 \$	2771.09 \$	31282.70 -26.23 \$ -834.70
03 A	480.00 \$	23848.00	Rev 1	18.25 \$	477.01 \$	0.00 \$	180.97 \$	657.98	393.72 \$	14322.23 \$	1887.44 \$	2220.79 \$	18430.46 86.28 \$ 5417.54
04 A	510.00 \$	23821.00	Rev 1	58.00 \$	1797.43 \$	0.00 \$	528.12 \$	2325.55	564.72 \$	19612.21 \$	1821.97 \$	2739.75 \$	26173.95 -54.72 \$ -352.93

overrun

Contract No. 68-W9-0040  
 Financial Report No. 31  
 Period: 09/29/91 to 10/26/91

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 13:01

A. T. KEARNEY, INC. EPA FINANCIAL MANAGEMENT SYSTEM

SUMMARY OF PROJECT WITHIN WORK ASSIGNMENT

Budgeted		Current					Project to Date					Remaining Balance	
Hours	Total Cost	Hours	Labor Cost	Travel	Other	Total Cost	Hours	Labor Cost	Travel	Other	Total Cost	Hours	Cost
REGION II													
Work Assignment: R02-16													
Project													
05	564.00 \$	23634.00	Rev. 1 0.25 \$	4.04 \$	0.00 \$	667.49 \$	671.53	605.73 \$	19371.55 \$	2003.64 \$	4810.82 \$	26186.01	-41.73 \$ -2552.01
06	540.00 \$	23999.00	Rev. 1 77.75 \$	2506.58 \$	0.00 \$	1003.87 \$	3510.45	507.48 \$	17442.74 \$	763.93 \$	2853.29 \$	21059.96	32.52 \$ 2939.04
07	396.00 \$	23672.00	Rev. 1 10.50 \$	274.45 \$	0.00 \$	254.20 \$	528.65	419.13 \$	17250.02 \$	2115.46 \$	2791.49 \$	22156.97	-23.13 \$ 1515.03
08	1050.00 \$	50450.00	Rev. 1 1.50 \$	76.15 \$	0.00 \$	252.69 \$	328.84	942.98 \$	38171.10 \$	183.74 \$	12289.76 \$	50644.60	107.02 \$ -194.60
09	511.00 \$	26861.00	Rev. 1 7.00 \$	182.97 \$	0.00 \$	84.03 \$	267.00	595.53 \$	21106.08 \$	2951.77 \$	3394.46 \$	27452.31	-84.53 \$ -591.31
Total of Projects in Work Assignment: R02-16													
	5043.00 \$	267368.00	264.75 \$	10509.98 \$	0.00 \$	3445.84 \$	13955.82	5011.54 \$	201620.16 \$	15432.31 \$	37428.86 \$	254481.33	31.46 \$ 12886.67

Work Assignment Budget:  
 4081.00 \$ 204046.00  
 Budget Available for Additional Projects:  
 -962.00 \$ -63322.00

Work Assignment: R02-17

Project													
01	244.00 \$	25596.00	Rev. 1 1.00 \$	98.56 \$	0.00 \$	845.80 \$	944.36	526.75 \$	14599.46 \$	3445.54 \$	3809.43 \$	21854.43	-282.75 \$ 3741.57
Total of Projects in Work Assignment: R02-17													
	244.00 \$	25596.00	1.00 \$	98.56 \$	0.00 \$	845.80 \$	944.36	526.75 \$	14599.46 \$	3445.54 \$	3809.43 \$	21854.43	-282.75 \$ 3741.57

Work Assignment Budget:  
 400.00 \$ 20000.00  
 Budget Available for Additional Projects:  
 156.00 \$ -5596.00

Work Assignment: R02-18

Project													
01	182.00 \$	5915.00	0.00 \$	0.00 \$	0.00 \$	1183.61 \$	1183.61	188.25 \$	4206.26 \$	0.00 \$	1791.52 \$	5997.78	-6.25 \$ -82.78

Contract No. 68-W9-0040  
Financial Report No. 31  
Period: 09/29/91 to 10/26/91

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11/14/91  
13:01

A. T. KEARNEY, INC. EPA FINANCIAL MANAGEMENT SYSTEM

SUMMARY OF PROJECT WITHIN WORK ASSIGNMENT

Budgeted		Current					Project to Date					Remaining Balance	
Hours	Total Cost	Hours	Labor Cost	Travel	Other	Total Cost	Hours	Labor Cost	Travel	Other	Total Cost	Hours	Cost
REGION II													
Total of Projects in Work Assignment: R02-18													
182.00	\$ 5915.00	0.00	\$ 0.00	\$ 0.00	\$ 1183.61	\$ 1183.61	188.25	\$ 4206.26	\$ 0.00	\$ 1791.52	\$ 5997.78	-6.25	\$ -82.78
Work Assignment Budget:													
60.00	\$ 6000.00												
Budget Available for Additional Projects:													
-122.00	\$ 85.00												
Work Assignment: R02-19													
Project													
01 A	3164.00 \$ 70698.00	Rev. 3 363.25 \$	6120.83 \$	0.00 \$	930.35 \$	7051.18	986.00 \$	17064.21 \$	0.00 \$	2290.89 \$	19355.10	2178.00 \$	51342.90
Total of Projects in Work Assignment: R02-19													
3164.00	\$ 70698.00	363.25	\$ 6120.83	\$ 0.00	\$ 930.35	\$ 7051.18	986.00	\$ 17064.21	\$ 0.00	\$ 2290.89	\$ 19355.10	2178.00	\$ 51342.90
Work Assignment Budget:													
800.00	\$ 40000.00												
Budget Available for Additional Projects:													
-2364.00	\$ -30698.00												
Work Assignment: R02-20													
Project													
01 A	392.00 \$ 30172.00	Rev. 1 43.75 \$	3293.05 \$	0.00 \$	504.59 \$	3797.64	201.00 \$	13223.21 \$	0.00 \$	1259.66 \$	14482.87	191.00 \$	15689.13
02 A	386.00 \$ 29611.00	Rev. 1 75.50 \$	5770.89 \$	510.02 \$	464.42 \$	6745.33	254.75 \$	16648.81 \$	510.02 \$	1376.18 \$	18535.01	131.25 \$	11075.99
03 A	392.00 \$ 30145.00	Rev. 1 82.75 \$	5793.41 \$	527.00 \$	547.58 \$	6867.99	223.50 \$	15555.74 \$	527.00 \$	1272.62 \$	17355.36	168.50 \$	12789.64

Contract No. 68-W9-0040  
 Financial Report No. 31  
 Period: 09/29/91 to 10/26/91

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 11/14/91  
 13:01

A. T. KEARNEY, INC. EPA FINANCIAL MANAGEMENT SYSTEM

SUMMARY OF PROJECT WITHIN WORK ASSIGNMENT

Budgeted		Current					Project to Date					Remaining Balance	
Hours	Total Cost	Hours	Labor Cost	Travel	Other	Total Cost	Hours	Labor Cost	Travel	Other	Total Cost	Hours	Cost
REGION 11													
Total of Projects in Work Assignment: R02-20													
1170.00	\$ 89928.00	202.00	\$ 14857.35	\$ 1037.02	\$ 1516.59	\$ 17410.96	679.25	\$ 45427.76	\$ 1037.02	\$ 3908.46	\$ 50373.24	490.75	\$ 39554.76
Work Assignment Budget:													
1800.00	\$ 90000.00												
Budget Available for Additional Projects:													
630.00	\$ 72.00												
Work Assignment: R02-21													
Project 01	489.00 \$ 26975.00	31.00 \$	2638.72 \$	0.00 \$	131.01 \$	2769.73	92.00 \$	5674.11 \$	0.00 \$	402.44 \$	6076.55	397.00 \$	20898.45
Total of Projects in Work Assignment: R02-21													
489.00	\$ 26975.00	31.00	\$ 2638.72	\$ 0.00	\$ 131.01	\$ 2769.73	92.00	\$ 5674.11	\$ 0.00	\$ 402.44	\$ 6076.55	397.00	\$ 20898.45
Work Assignment Budget:													
500.00	\$ 25000.00												
Budget Available for Additional Projects:													
11.00	\$ -1975.00												
Total for Region R02													
29147.25	\$ 1673718.76	1149.00	\$ 51682.92	\$ 1037.02	\$ 11659.53	\$ 64379.47	24459.19	\$ 1111109.73	\$ 65636.66	\$ 214818.24	\$ 1391564.63	4688.06	\$ 282154.13

**INLAND  
FISHER GUIDE**



PEL: 91-301

December 9, 1991

Mr. Leland Flocke  
Regional Director  
New York State Department  
of Environmental Conservation  
Region 7  
615 Erie Boulevard West  
Syracuse, New York 13204-2400

U.S. ENVIRONMENTAL PROTECTION  
AGENCY, REGION II  
NEW YORK, N.Y.  
91 DEC 16 PM 1:18  
PERMITS ADMINISTRATION  
BRANCH

NYD 002 239440  
CA 91-12/09/91

Subject: N.Y.S. D.E.C. vs. General Motors Corporation  
(Inland Fisher Guide Division - Syracuse Plant)  
Case No. R-7-002-85-05

Dear Gentlemen:

Enclosed please find the Quarterly Well Monitoring Report  
Exhibit A, Compliance Schedule, No. 1, for the Fourth  
Quarter of 1991.

If you have any questions, please contact Mr. Ernest W.  
Mattheis, Jr. of my staff at the following telephone  
number: (315) 432-5024.

Very truly yours,

INLAND FISHER GUIDE DIVISION  
General Motors Corporation  
Syracuse Plant

  
Michael K. Stout  
Plant Manager

Enclosure

cc: William F. McCarthy, N.Y.S. D.E.C.  
Robert Burdick, Onondaga County Dept. of Health  
U.S. Environmental Protection Agency



[illegible]

PG 2

[illegible]

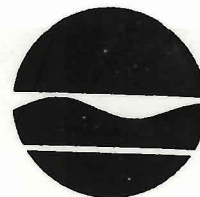
## BIWEEKLY WELL MONITORING - SOLVENT CONSENT ORDER

#R7-0002-85-05

Pg 3

PARAMETERS	WELL T-1	T-2	T-3	T-4	T-5	T-6	T-7	T-8	T-9	UNITS	T-10	BLANK
SET 139 10-29-91										ug/L		
TOTAL XYLENES	<375.	98000.	83000.	71000.	3600.	<15.	<15.	<15.	Na		<15.	<15.
TOLUENE	<13.	<2000.	<5000.	<5000.	<50.	<5.0	<5.0	<5.0	Na		<5.0	<5.0
ETHYLBENZENE	<375.	17300.	14400.	14200.	1590.	<5.0	<5.0	<5.0	Na		7.9	<5.0
TOTAL	<763.	<117300.	<102400.	<90200.	<5240.	<25.	<25.	<25.	Na		<27.9	<25.
PARAMETER	WELL T-1	T-2	T-3	T-4	T-5	T-6	T-7	T-8	T-9		T-10	BLANK
SET 140 11-8-91												
TOTAL XYLENES	<200.	140000.	108000.	101000.	6420.	<15.	<15.	<15.	Na		431.	<15.
TOLUENE	<5.0	<2000.	<5000.	<5000.	<100.	<5.0	<5.0	<5.0	Na		<5.0	<5.0
ETHYLBENZENE	24.	22000.	17600.	18700.	3040.	<5.0	<5.0	<5.0	Na		122.	<5.0
TOTAL	<229.	<164000.	<130600.	<124700.	<9560.	<25.	<25.	<25.	Na		<558.	<25.

New York State Department of Environmental Conservation  
50 Wolf Road, Albany, New York 12233



Thomas C. Jorling  
Commissioner

May 28, 1991

William E. Kochem, Jr.  
Supervisor, Plant Engineering  
Inland Fisher Guide Division  
General Motors Corporation  
1000 Town Line Road  
Syracuse, NY 13221-4869

CA 91-05/28/91

Dear Mr. Kochem:

Re: QA/QC for 1989/1990 Annual Reports  
NYD002239440

The New York State Department of Environmental Conservation has reviewed your May 15, 1991 response to our comments on the above-referenced documents. Your 1989 Annual Report is approved provided the following change in analytical methods is made: the method must be changed from ICP to Graphite Furnace to attain a detection limit of 5.0  $\mu\text{g/l}$  for lead. In addition, please provide a brief summary of the repairs performed to wells MW-3S, MW-3D and MW-1S within 30 days of completion of the work.

Comments on your 1990 annual report will be sent separately. If you have any questions, please call Ms. Luanne F. Whitbeck, of my staff, at (518) 457-9255.

Sincerely,

Paul R. Counterman, P.E.  
Director  
Bureau of Haz. Waste Facility Mgmt.  
Division of Haz. Substances Regulation

cc: L. Whitbeck ✓  
J. Petiet  
J. Desai  
E. Miles  
P. Patel  
M. McPeck, Reg. 7  
G. Meyer, USEPA Reg. II  
A. Bellina, USEPA Reg. II



NYD 002239440

May 15, 1991

PEL: 91-140

**INLAND  
FISHER GUIDE**



Mr. Paul R. Counterman, P.E.  
Director  
Bureau of Hazardous Waste  
Facility Management  
Division of Hazardous  
Substances Regulation  
New York State Department of  
Environmental Conservation  
50 Wolf Road  
Albany, New York 12233

MAY 20 1991

EA 91-05/15/91

Dear Mr. Counterman:

Please find attached our response to your April 16, 1991 letter regarding the 1989 and 1990 Annual reports for the Inland Fisher Guide - Syracuse facility.

If you have any questions, please feel free to contact me at (315) 432-5314.

Yours very truly,

INLAND FISHER GUIDE DIVISION  
General Motors Corporation  
Syracuse Plant

A handwritten signature in dark ink, appearing to read 'William E. Kochem Jr.'.

William E. Kochem Jr.  
Supervisor Plant Engineering

cc: L. F. Whitbeck - DEC  
R. J. Larkin - IFG  
M. McPeck - DEC Region #7  
P. Patel - DEC

Responses to NYSDEC Comment  
letter dated April 16, 1991  
1989 - 1990 Annual Report

APPENDIX B

As indicated in our March 7, 1991 letter, monitoring wells MW-3S, MW-3D, and MW-1S were slightly damaged by heavy equipment. These wells were inspected during the week of April 29, 1991 to access the appropriate repairs. Any repairs will be completed by the second quarter sampling event which is tentatively scheduled during June 1991.

APPENDIX C

As per your request, if a light, non-aqueous plate liquid (LNAPL) is observed during sampling, a sample of this liquid will be collected prior to collecting the ground water samples. The sample will be analyzed for volatile organic compounds, semi-volatiles and PCBs in accordance with the EPA procedures identified in the RCRA Post Closure Permit Application.

QC/OA REVIEW

The following will be include in future reporting and sampling events:

Surrogate recovery data and matrix spike data will be reported along with the sample analytical data for both VOCs and PCBs.

Matrix spike and matrix spike duplicate data will be conducted on a ground water sample, rather than a blank.

The heavy metal analyses will be performed with the following detection limits:

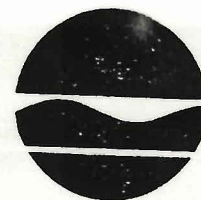
<u>Parameters</u>	<u>Detection Limit</u>
Silver	10 ug/l
Arsenic	5 ug/l
Beryllium	5 ug/l
Cadmium	5 ug/l
Chromium	10 ug/l
Copper	25 ug/l
Mercury	0.2 ug/l
Nickel	40 ug/l
Lead	5 ug/l
Antimony	60 ug/l
Selenium	5 ug/l
Thallium	10 ug/l
Zinc	20 ug/l

To attain these detection limits, the analytical method for thallium will be changed from Inductively Coupled Plasma (ICP) to Graphite Furnace. The analytical methods for the other parameters will remain the same as utilized in the past.

Table 4 in the 1990 Annual Report will be corrected to report the results in ppb rather than ppm.



New York State Department of Environmental Conservation  
50 Wolf Road, Albany, New York 12233



Thomas C. Jorling  
Commissioner

April 16, 1991

Mr. William E. Kochem, Jr.  
Supervisor - Plant Engineering  
Inland Fisher Guide Division  
General Motors Corporation  
1000 Town Line Road  
Syracuse, NY 13221-4869

CA 91-04/16/91

Dear Mr. Kochem:

Re: 1989 Annual Report  
NYD002239440

The New York State Department of Environmental Conservation has received your March 7, 1991 letter regarding the above-referenced report. The Department has reviewed this response to our February 6, 1991 comments on your initial submission and determined that two items have not been adequately addressed:

In APPENDIX B, concerning the damaged wells, a schedule for the repair or replacement of these wells must be submitted to the Department within 30 days of the date of this letter.

In APPENDIX C Sampling Procedures (Bailer) and (Pumping), Number 9. If the presence of LNAPL is observed, a sample must be collected prior to collecting the regular samples. This sample must be analyzed for volatiles, semi-volatiles and PCBs.

In addition, enclosed is a copy of the chemist's QA/QC review for both your 1989 and 1990 Annual Reports. The deficiencies noted in this attached memo must be addressed within 30 days of the date of this letter.

If you have any questions regarding the QA/QC, please contact Mr. John Petiet, at (518) 457-7269. If you have any other questions, please contact Ms. Luanne F. Whitbeck at (518) 457-9255.

Sincerely,

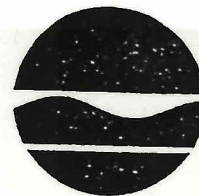
*Paul R. Counterman*

Paul R. Counterman, P.E.  
Director  
Bureau of Haz. Waste Facility Mgmt.  
Division of Haz. Substances Regulation

cc: L. Whitbeck  
J. Petiet  
J. Desai  
E. Miles  
P. Patel  
M. McPeck, Reg. 7  
G. Meyer  
A. Bellina

CA 91-03/28/91

New York State Department of Environmental Conservation  
50 Wolf Road, Albany, New York 12233



Thomas C. Jorling  
Commissioner

M E M O R A N D U M

TO: Luanne Whitbeck, Engineering Geology Section  
FROM: John Petiet, RCRA Permit Section 2  
SUBJECT: Annual Groundwater Monitoring from GM Fisher Guide  
DATE: March 28, 1991

I have reviewed the groundwater monitoring data from both 1989 and 1990 at the above referenced facility. Below are my comments:

**Volatiles**

Matrix spike and matrix spike duplicates were performed at the proper frequency and the percent recoveries are generally acceptable. Samples were analyzed within the proper holding times. No surrogate data, however, was supplied with the volatiles data, except the Appendix IX data from 1989. Surrogates should be used during analysis for every sampling event and the percent recoveries reported along with the sample results. There was good agreement, except for trichloroethylene, on a sample analyzed by GC by one lab and GC/MS by another. See table below:

<u>PARAMETER</u>	<u>GC RESULT</u>	<u>GC/MS RESULT</u>
vinyl chloride	12 ug/L	19 ug/L
1,2 dichloroethylene	270	240
trichloroethylene	1500	2700

**PCBs**

Matrix spike and matrix spike duplicate data was reported on a blank instead of an actual sample. Sufficient groundwater should be collected to perform an MS/MSD for PCBs on a sample. Surrogate data was reported for PCBs for the August 1989 sampling round and the 1989 Appendix IX samples only. This data must be provided for each sampling event.

**Metals**

The matrix spike and duplicate data is fine. One problem,

however, is the reported detection limits and the groundwater standards for certain metals. See table below:

<u>PARAMETER</u>	<u>LABORATORY DETECTION LIMIT</u>	<u>STATE ASP CRQL</u>	<u>GROUNDWATER<sup>1</sup> STANDARD</u>
silver	10 ug/L	10 ug/L	50 ug/L
arsenic	5	5	25
beryllium	50	5	3 TOGS
cadmium	10	5	10
chromium	50	10	50
copper	10	25	200
mercury	0.5	0.2	2
nickel	50	40	700
lead	50	5	25
antimony	10	60	3 TOGS
selenium	5	5	10
thallium	50	10	4 TOGS
zinc	20	20	300

<sup>1</sup> either a part 5, part 170, or part 703 standard unless labeled TOGS. TOGS values are guidance only and not regulatory standards.

The groundwater monitoring detection limits given above are the Contract Required Quantitation Limits (CRQL) in the 1989 New York State Analytical Services Protocol (ASP), which are almost identical to the values given in Table 2-15 in Chapter 2 of SW-846, 3rd edition. As can be seen from this table, the reported laboratory detection limits exceed these accepted detection limits, and in some instances are equal to or greater than the groundwater standard. This is true for beryllium, cadmium, chromium, lead, and thallium. These metals must be analyzed by a more sensitive method, such as graphite furnace AA or ICP, so that the detection limit is, ideally, four times lower than the groundwater standard, or equal to the CRQL detection limits.

Table 4 in the 1990 annual report is incorrect as to the units being reported, i.e. ppb versus ppm. This can be confirmed by the metals data sheets.

#### Appendix IX Organics

Herbicides do not appear to be a problem on-site. The surrogate recoveries were fine for 1989, however, no surrogate recovery data was available due to matrix interference or dilution on the 1990 data.

Organophosphorus pesticides were not detected. Surrogate recovery was low and out of the control range for 1990, while surrogates were high and out of control for 1989.

Semivolatiles were not detected in the groundwater, except bis 2-ethylhexylphthalate, a common lab contaminant. No QA/QC data such as MS/MSD data or surrogate recoveries were reported in 1990.

Surrogates were reported with the 1989 data and the percent recoveries were fine. Surrogate and matrix spike data should be provided with each sampling event.

None of the above compounds appear to be present at this site.

If you have any questions regarding my comments, please see me or call me at 457-7269.

cc: M. Detlefsen



CA91-03/04/91

Environmental Protection Agency  
Region II - Hazardous Waste Facilities Branch  
New York Facilities Section

Date 3/4/91

( ) Conrad Simon  
( ) Helen Beggun  
( ) Andrew Bellina  
( ) Eddie Hernandez  
( ) Tara Fitzgibbon  
( ) Ellen Parr-Doering  
( ) Michael Poetzsch

( ) Adolph Everett  
( ☒ ) Marwan Fanek  
( ) Maria Jon  
( ) Anthony Kahaly  
( ) Carol Stein  
( ) Ellen Stein  
( ) Alan Straus  
( ) Zintars Zadins

Remarks Is the attached RFA/SV Workplan  
one that was developed by our  
contractor, A.T. Kearney or did the  
applicant develop it? Developed by AT Kearney

What is status of DP?  
- There will be no operating permit  
- A post closure permit is scheduled  
to be public noticed in March 91.

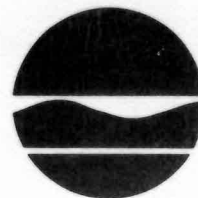
( ) Action Comments/Response due by According to DEC  
( ) FYI project manager, this  
( ) Circulate public notice may  
( ) Return to be delayed due  
( ) CS's Signature to competing priorities.  
( ☒ ) See me to discuss by 959f

Thanks,  


James Reidy, P.E., Chief  
New York Facilities Section

Marwan

New York State Department of Environmental Conservation  
50 Wolf Road, Albany, New York 12233



Thomas C. Jorling  
Commissioner

MAR 01 1991

FEB 22 1991

Mr. James Reidy, Chief  
New York Facilities Section  
U.S. Environmental Protection Agency  
Region II  
26 Federal Plaza  
New York, NY 10278

Dear Mr. Reidy:

Re: General Motors Fisher Guide  
RFA/SV Work Plan

The above-referenced document resubmitted on December 11, 1990, has been reviewed by this Department.

The comments generated for the original submission have been addressed in this version of the work plan and it may now be considered approved.

If you have any questions, please contact Mr. Paul Patel, of my staff, at (518) 457-9696.

Sincerely,

Paul R. Counterman, P.E.  
Director  
Bureau of Hazardous Waste  
Facility Management  
Division of Hazardous Substances  
Regulation

cc: P. Patel  
L. Whitbeck

New York State Department of Environmental Conservation  
50 Wolf Road, Albany, New York 12233

February 6, 1991

CA 91-02/06/91

Thomas C. Jorling  
Commissioner

Mr. Richard J. Larkin  
Manager  
Manufacturing Engineering  
Fisher Guide Division of GMC  
1000 Town Line Road  
Syracuse, NY 13221-4869

Re: 1989 Annual Report  
NYD02239440  
NYD002239440

Dear Mr. Larkin:

The NYSDEC has received GMC Fisher Guide's 1989 Annual Report dated March 14, 1990.

The Report did not provide "...the calculated (or measured) rate of migration of hazardous waste or hazardous waste constituents in the groundwater. . ." as required in 6NYCRR 373-3.6(e)(2)(ii). Comments on the report, with the exception of QA/QC, are enclosed. If a problem is found with the QA/QC, you will be notified under separate cover.

GMC Fisher Guide must respond to the enclosed comments by March 11, 1991. Failure to submit the required information may subject Fisher Guide to enforcement action.

If you have any questions, please contact Ms. Luanne F. Whitbeck, of my staff, at (518) 457-9255.

Sincerely,

*Paul R. Counterman*

Paul R. Counterman, P.E.

Director

Bureau of Haz. Waste Facility Management  
Division of Haz. Substances Regulation

Enc.

cc: J. Desai  
E. Miles  
L. Whitbeck  
P. Patel  
L. Gross, Region 7  
G. Meyer  
A. Bellina

G Meyer



*John*

Rec'd  
2/13

File

91 MAR -4 PM 12:50  
REGIONAL HEARING  
CLERK

ENVIRONMENTAL PROTECTION  
AGENCY, REGION II

HAZARDOUS WASTE  
COMPLIANCE  
91 FEB 11 PM 12:12  
AGENCY FILE



NYSDEC  
ENGINEERING GEOLOGY SECTION  
FEBRUARY 1991 COMMENTS ON  
FISHER GUIDE DIVISION OF GMC  
1989 ANNUAL GROUNDWATER QUALITY ASSESSMENT  
REPORT DATED FEBRUARY 1990

SECTION 1 - INTRODUCTION

Page 1, Paragraph 2

No data summaries for cyanide were reported on the tables. Also, the chain-of-custody record for each sampling event does not indicate that cyanide was sampled for. Was cyanide sampled for as a site specific indicator parameter as stated in this paragraph? If so, please provide the data and QA/QC.

SECTION 3 - DATA ASSESSMENT

The rate of migration of hazardous waste or hazardous waste constituents must be provided (373-3.6(e)(2)). What are vertical and horizontal gradients?

Inorganic Analysis

Paragraph 1

This paragraph is inaccurate. Zinc was not the only filtered metal detected in the upgradient wells. Filtered chromium was found in Well 2S on 11/22/89 at 0.23 ppm and on 12/11/89 at 0.16 ppm.

In addition to filtered zinc, chromium and nickel found in downgradient wells, filtered lead was found in Well 4S on 12/11/89 at 0.06 ppm.

In the upgradient wells, total lead was found on 10/24/89 at 0.13 ppm in Well 1D, (higher than the 0.11 ppm stated in this paragraph).

It may be appropriate to analyze the samples for turbidity if Fisher Guide wishes to determine the effect of suspended sediment on total vs. soluble analyses.

3.03 APPENDIX IX ANALYSIS

Paragraph 2

All hazardous constituents detected at the MDL must be added to the site-specific parameter list, not just those detected at levels above the NYS Groundwater Quality Standards. Please review the data and revise the parameter list if necessary.

The introduction states that cyanide is already a site-specific parameter for the 1989 sampling event. Please clarify the status of cyanide.

#### APPENDIX B

The Ground Water Sampling Field Log sheets for 11/89 indicate that wells MW-1S, MW-3S and MW-3D were damaged. Please provide the details on the repair or replacement of these wells.

#### APPENDIX C

##### Sampling Procedures (Bailer)

9. If LNAPL is found, it is to be sampled from this first bailer prior to purging, not disposed of.
22. Is this a dedicated bailer to be left in the well? If not, then this cleaning procedure is inadequate. Please refer to the QAPjP for the appropriate cleaning procedure.

##### Sampling Procedures (Pump)

9. See Comment No. 9 above.
14. All the samples should be taken with the bailer to assure continuity and avoid additional sources of contamination or cross-contamination.
20. See Comment No. 22 above.

Kearney/Centaur Division  
A.T. Kearney, Inc.  
225 Reinekers Lane  
P.O. Box 1438  
Alexandria, Virginia 22313  
703 548 4700  
Facsimile 703 683 2407

Management  
Consultants

ENVIRONMENTAL PROTECTION  
AGENCY REGION II

90 NOV 35 AM 11:40

HAZARDOUS WASTE  
PROGRAMS BRANCH

**AT KEARNEY**

December 4, 1990

CA 90-12/04/90

Mr. Ben Singh  
Regional Project Officer  
U.S. Environmental Protection Agency  
Region II  
26 Federal Plaza, Room 907  
New York, New York 10278

Reference: EPA Contract No. 68-W9-0040; Work Assignment No. R02-01-06;  
General Motors Corporation, Fisher Guide Division (GMC), Syracuse,  
New York; EPA I.D. No. NYD002239440; Revised Sampling and  
Analysis Plan

Dear Mr. Singh:

Attached is the revised Sampling and Analysis Plan for GMC Fisher Guide. This revision is the result of a review performed by staff of the New York State Department of Environmental Conservation.

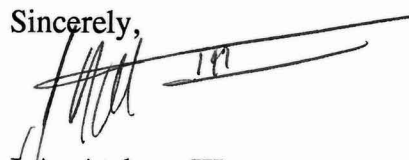
SWMUs selected for sampling as part of the sampling visit include all those units where there were soil stains or spills onto unprotected soil. There are three additional SWMUs that exhibited spillage for which no sampling was recommended because the units are located indoors on a concrete floor and there was no evidence that the spillage had migrated to soils or other environmental media. Four units are regulated as RCRA units and/or are being closed under a RCRA closure plan. For these units, it was recommended that any release potential be addressed under the RCRA closure plan. For units where there were documented releases, an RFI was recommended rather than sampling as part of the sampling visit.

Additional discussion regarding the rationale for suggested further actions at each SWMU and AOC is included in the Phase II RCRA Facility Assessment Report submitted to the EPA on March 27, 1989.

Mr. Ben Singh  
December 4, 1990  
Page Two

If you have any questions or comments, please call me or Steve Heikkila, the Kearney Work Assignment Manager (612) 227-6500.

Sincerely,



J.A. Atchue III  
Technical Director

Enclosure

cc: M. Fanek, Region II  
A. Glazer  
J. Atlas  
L. Poe  
B. Smith  
W. Rohrer, DPRA



Fisher Guide Division

1000 Town Line Road

General Motors Corporation

Syracuse, New York 13221-4869

Syracuse Plant

NYD 002239440

CA 90-03/29/90

ED.  
What's the hold-up?  
please brief me  
HJB



PEL: EM90-051

March 29, 1990



Mr. Marwan Fanek  
United States Environmental Protection Agency  
Region II  
26 Federal Plaza  
New York, New York 10278

Subject: EPA Sampling and Analysis Plan/  
RCRA Facility Assessment

Dear Mr. Fanek:

Per our telephone conversation on 3/22/90, we will postpone implementation of the sampling and analysis plan portion of the RCRA facilities assessment dealing with our facility, until future notification from the U.S.E.P.A.

Very truly yours,

INLAND FISHER GUIDE DIVISION  
General Motors Corporation  
Syracuse Plant

Linda G. Yaus

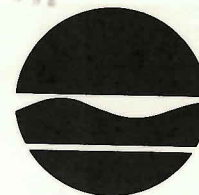
Linda G. Yaus  
Sr. Environmental Engineer  
(315) 432-5197

cc: Andrew Bellina, EPA Region II  
Paul Counterman, N.Y.S.D.E.C.-Albany  
Paul Petal, N.Y.S.D.E.C.-Albany



MAR 28 REC'D

New York State Department of Environmental Conservation  
50 Wolf Road, Albany, New York 12233



Thomas C. Jorling  
Commissioner

*E. Jorling!*  
*Please see me*  
*on this ASAP.*  
*AB*

MAR 26 1990

CA 90-03/26/90

Mr. Andrew Bellina, Chief  
Hazardous Waste Facilities Branch  
U.S.E.P.A. Region II  
26 Federal Plaza, Room 1043  
New York, NY 10278

Dear Mr. Bellina:

Re: GMC Fisher Guide, Syracuse  
Sampling Visit Work Plan  
EPA I.D. No. NYD002239440

This office received a copy of the Sampling and Analysis Plan prepared by A.T. Kearney Inc. for General Motors Corporation Fisher Guide Division on March 16, 1990, along with a letter from your office requesting that the plan be implemented expeditiously. Based only on a cursory reading of the document, however, this Department has serious reservations concerning the sampling plan and the adequacy of any data generated from the plans execution.

Please withdraw the workplan until a thorough review can be performed. This office will submit detailed comments as soon as possible.

If you have any questions, please contact Mr. Paul Patel, of my staff, at (518) 457-9696.

Sincerely,

Paul R. Counterman, P.E.  
Director  
Bureau of Hazardous Waste Facility  
Management  
Division of Hazardous Substances  
Regulation

cc: B. Kockem  
P. Patel



NYD 002239440

CA 90-03/14/90

MAR 14 1990

Mr. Richard J. Larkin  
Manager  
Fisher Guide Engineering  
General Motors Corporation  
1000 Town Line Road  
Syracuse, New York 13221-4869

Dear Mr. Larkin:

Attached is the Sampling and Analysis (S&A) Plan for the Sampling Visit (SV) at General Motors Corporation, Fisher Guide Division (GMC), Syracuse, New York. The SV is Phase III of the Resource Conservation and Recovery Act (RCRA) Facility Assessment (RFA). In addition to the SV, the RFA includes a Preliminary Assessment (PR) of all available relevant documents, and a Visual Site Inspection (VSI).

The 1984 Hazardous and Solid Waste Amendments (HSWA) to RCRA authorized EPA to require corrective action for releases of hazardous waste and/or hazardous constituents from Solid Waste Management Units (SWMUs) and other areas of concern (AOCs) at all operating, closed, or closing RCRA facility. The first phase of the corrective action program as established by EPA is development of a RCRA Facility Assessment.

The EPA plans to issue a HSWA permit in conjunction with the post-closure permit which will be issued by the New York State Department of Environmental Conservation (NYSDEC) in the near future. Section 3004(u) of HSWA requires that any permit issued after November 8, 1984, require corrective action for all releases from SWMUs at the facility.

Therefore, the attached S&A plan and potential further investigation will be included in the HSWA permit for the facility, and GMC will be responsible for collecting all samples in accordance with the attached S&A plan. Expedient implementation of this S&A plan would assist in detecting and correcting releases that threaten human health or the environment. A sampling schedule should be submitted to EPA within twenty (20) days of the date of this letter.

Please note that all analytical work must be conducted by a NYSDEC-certified laboratory, and that it will be GMC's responsibility to ensure the health and safety of GMC's sampling personnel.

If you have any questions regarding this matter, please contact Mr. Marwan Fanek, of my staff, at (212) 264-9578.

Sincerely yours,

Andrew Bellina, Chief  
Hazardous Waste Facilities Branch

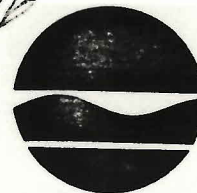
Attachment

cc: Paul Counterman, NYSDEC-Albany w/attach.

bcc: Marwan Fanek, 2AWM-HWF w/o attach.  
Ellen Doering, 2AWM-HWF w/o attach.  
Andrew Bellina, 2AWM-HWF w/o attach.

**New York State Department of Environmental Conservation**  
50 Wolf Road, Albany, New York 12233

FEB - 9 1990



Thomas C. Jorling  
Commissioner

Mr. Richard J. Larkin  
Manager  
Manufacturing Engineering  
Fisher Guide Division of GMC  
1000 Town Line Road  
Syracuse, NY 13221-4869

CA 90-02/09/90

NYD 002239440

Dear Mr. Larkin:

Pursuant to 6 NYCRR 373-3.6(e), owners and operators of RCRA Interim Status TSD Facilities are required to submit groundwater monitoring data in an annual report. This report must be submitted by March 1st of each year.

Fisher Guide has been in an alternate monitoring program during calendar year 1989 and, therefore, must comply with the reporting requirements of Paragraph 373-3.6(e)(2).

Please regard this letter as a reminder that all groundwater monitoring data generated by/for Fisher Guide in calendar year 1989 must be submitted to the Department by March 1, 1990. The annual report may summarize any previously submitted reports and must provide all raw data as well as an interpretation of existing data. An evaluation of groundwater elevations determined at each well should be included.

The report should be submitted in duplicate to:

New York State Department of Environmental Conservation  
Division of Hazardous Substances Regulation  
Bureau of Hazardous Waste Facility Management  
50 Wolf Road  
Albany, NY 12233-7251  
Attn: Ms. Luanne F. Whitbeck

Please be advised that failure to submit the required information by March 1, 1990 may subject Fisher Guide to enforcement action.

If you have any questions about these requirements or the adequacy of the information to be submitted, please do not hesitate to call Ms. Luanne Whitbeck, of my staff, at 518-457-9255.

Sincerely,

Paul R. Counterterm, P.E.  
Director  
Bureau of Hazardous Waste Facility Management  
Division of Hazardous Substances Regulation

cc: J. Desai  
- E. Miles  
L. Whitbeck  
P. Patel  
L. Gross, R-7  
G. Meyer, EPA R-II ✓  
A. Bellina, EPA R-II





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION II  
26 FEDERAL PLAZA  
NEW YORK, NEW YORK 10278

NYD 80 223 9440

DEC 28 1989

CA 89-2/28/89

Ms. Gail Klein  
A.T. Kearney  
225 Reinekers Lane  
Alexandria, VA 22314

Re: Resource Conservation and Recovery Act (RCRA)  
RCRA Facility Assessment (RFA)  
A.T. Kearney schedule for RFA projects:  
GMC Fisher Guide Division, GMC Harrison Radiator, Envirotek,  
LTD.

Dear Ms. Klein:

As discussed during your telephone conversation with Mr. Luis Negron, of my staff, on December 2, 1988, the schedule which A.T. Kearney should maintain for the referenced projects is outlined below:

- 1) GMC-Fisher Guide Division:  
Draft Preliminary Review (PR) report: Submit to EPA by December 29, 1988.  
  
Visual Site Inspection (VSI): Conduct on January 18-19, 1989.
- 2) GMC-Harrison Radiator:  
Draft Sampling Visit Work Plan (SV Work Plan): submit to EPA by December 29, 1988.
- 3) Envirotek, LTD:  
Draft PR report: Submit to EPA by December 29, 1988.  
VSI: To be conducted by January 23-24, 1989.

Since the due date for this contract is March 31, 1989, it is important to meet the above schedule.

-2-

If you have any questions, please contact Mr. Luis Negron,  
Project Engineer, at (212) 264-0994.

Sincerely yours,

Frank A. Langone, Chief  
New York Facilities Section

bcc: Luis Negron, 2AWM-HWF  
Frank Langone, 2AWM-HWF ✓



Kearney/Centaur Division  
A.T. Kearney, Inc.  
225 Reinekers Lane  
P.O. Box 1438  
Alexandria, Virginia 22313  
703 548 4700  
Facsimile 703 683 2407

Management  
Consultants

ENVIRONMENTAL PROTECTION  
AGENCY REGION II

89 NOV 30 AM 10:02

HAZARDOUS WASTE  
PROGRAMS BRANCH

Please review  
+ approve ASAB.  
Ben R Singh

November 29, 1989

Mr. Ben Singh  
Regional Project Officer  
U.S. Environmental Protection Agency  
Region II  
26 Federal Plaza, Room 907  
New York, NY 10278

ATKEARNEY

CA 89-11/29/89

Reference: EPA Contract No. 68-W9-0040; Work Assignment No. R02-01-07; GMC  
Fisher Guide Division, Syracuse, New York; EPA I.D. No.  
NYD002239440; Revised Sampling Visit Work Plan and Sampling Visit  
Report; Work Plan Revision 1

Dear Mr. Singh:

Enclosed please find the revised work plan which you requested for the above-referenced work assignment. This work plan calls for the Kearney Team to review HWFB, NYSDEC, and ESD comments concerning the initial Sampling Visit Work Plan (SVWP) prepared under Contract No. 68-01-7038, submit a revised SVWP, and provide evaluation of sampling results and recommendations for an RFI in a final SV report.

Based on a review of the original work plan, EPA requested that the proposed hours required to complete the assignment be reevaluated. The hours and costs reflect our understanding of the level of effort necessary to complete the entire assignment after finishing Tasks 01 and 02 of the original work plan and after reevaluating our original estimate for the tasks yet to be completed. Please note that the hours in Task 01 reflect not only the completion of the original work plan but also this revision.

All applicable A.T. Kearney conflict of interest avoidance procedures have been adhered to for the proposed firms and staffs.

Also enclosed is a work plan approval sheet which you should sign and return to Allen Pearce.

Please feel free to call me or Steve Heikkila, the Kearney Team Work Assignment Manager (who can be reached at 612/227-6500), if you have any questions.

Sincerely,

George P. Dixon

George P. Dixon  
Technical Director

cc: A. Pearce, EPA OSW  
C. Chase, EPA Contracts  
L. Negron, EPA Region II  
A. Glazer  
L. Poe

J. Atlas  
D. LaRusso  
S. Williamson  
M. Ritter  
W. Rohrer, DPRA

Marwan Faneck

REVISED WORK PLAN

GMC FISHER GUIDE DIVISION  
REVISED SAMPLING VISIT WORK PLAN AND SAMPLING VISIT REPORT

Submitted by:

Kearney/Centaur Division  
A.T. Kearney, Inc.  
225 Reinekers Lane  
Third Floor  
Alexandria, VA 22314

Submitted to:

Mr. Ben Singh  
Regional Project Officer  
U.S. Environmental Protection Agency  
Region II  
26 Federal Plaza, Room 907  
New York, NY 10278

In response to:

EPA Contract No. 68-W9-0040  
Work Assignment No. R02-01-07

November 29, 1989

EPA Contract No. 68-W9-0040  
Work Assignment No. R02-01-07  
GMC Fisher Guide Division  
Revised SV Work Plan and SV Report

Work Plan Revision No. 1  
November 29, 1989

Regional Work Plan Approval

I have reviewed the attached work plan and find it meets our criteria for technical accuracy and properly reflects the scope of work and intended use of the deliverable(s), as described in the work assignment. The projected cost, staff hour estimates, and labor mix are also acceptable.

APPROVAL:

\_\_\_\_\_  
EPA Regional Project Officer

\_\_\_\_\_  
Date

APPROVAL:

\_\_\_\_\_  
EPA Headquarters Project Officer

\_\_\_\_\_  
Date

APPROVAL:

\_\_\_\_\_  
EPA Contracting Officer

\_\_\_\_\_  
Date

CONCURRENCE:

\_\_\_\_\_  
A.T. Kearney Program Director

\_\_\_\_\_  
Date

GMC FISHER GUIDE DIVISION  
REVISED SAMPLING VISIT WORK PLAN AND SAMPLING VISIT REPORT

WORK TO BE PERFORMED

The Kearney Team will address State and EPA comments concerning the draft Sampling Visit Work Plan (SVWP) previously developed for the GMC Fisher Guide Division facility under Contract No. 68-01-7038. Comments will be incorporated in a revised SVWP. Once approved by EPA Region II, a Sampling Visit (SV) will be conducted by the facility. A final ~~SV~~ report will be written providing sampling results and recommendations for further investigation at the facility, including a RCRA Facility Investigation (RFI), if warranted. Analytical work will be conducted by the facility; consequently, no analytical costs have been included in the budget proposed for this work plan. RFA

PRIMARY INTENDED USE

The purpose of this project is to assist EPA Region II in determining what further corrective action activities are necessary at this facility. The deliverables will be worded as if written by EPA staff.

PROJECTS AND TASKS

The project will consist of the following tasks:

Task 01 - Prepare a work plan. This will include all preliminary contacts required for the preparation of the plan. The work plan budget estimate is based upon the draft SVWP submitted to EPA in February 1989, under Contract No. 68-01-7038.

Task 02 - Review comments from HWFB, NYSDEC, and ESD concerning the draft SVWP. Prepare a revised SVWP which incorporates the above review comments.

Task 03 - Upon receipt of the data from the SV, prepare a SV report which incorporates the evaluation of the SV data and provides recommendations for further action at the facility, including an RFI, if warranted.

Task 98 - Perform a quality control review of the draft deliverables.

Task 99 - Provide management oversight for the project.

HEALTH AND SAFETY PLAN

No site visit is associated with this project; therefore, a health and safety plan is not required.

EPA Contract No. 68-W9-0040  
Work Assignment No. R02-01-07  
GMC Fisher Guide Division  
Revised SV Work Plan and SV Report

Work Plan Revision No. 1  
November 29, 1989

- 2 -

#### MONTHLY PROGRESS REPORT

Information regarding the status of this project will be included in the monthly progress reports A.T. Kearney, Inc. provides to EPA. The information will address:

- Work completed to date,
- Difficulties encountered and remedial action taken,
- Anticipated activity during the subsequent reporting period, and
- Sufficiency of authorized dollars and hours to complete the project.

#### QUALITY CONTROL PLAN

The Kearney Team Work Assignment Manager (KWAM) will conduct milestone checks on each task. In addition, draft project deliverables will be reviewed by a senior technical staff member of Kearney/Centaur Division to ensure quality and consistency with EPA regulations and policy.

#### STAFFING AND MANAGEMENT

Steve Heikkila of DPRA Incorporated will serve as the Kearney Team Work Assignment Manager.

Individual staff responsibilities are shown in Attachment I. The proposed staffing and task assignments for the project are shown in Attachment II. Hour allocations are shown for each task.

All applicable conflict of interest (COI) avoidance procedures have been adhered to for the proposed firms and staffs.

#### PERFORMANCE SCHEDULE

The project will be conducted according to the schedule shown in Attachment III.

#### COST ESTIMATE

The estimated cost for completing this project is included as Attachment IV.

EPA Contract No. 68-W9-0040  
Work Assignment No. R02-01-07  
GMC Fisher Guide Division  
Revised SV Work Plan and SV Report

Work Plan Revision No. 1  
November 29, 1989

- 3 -

#### BASIS FOR PERFORMANCE EVALUATION

The measures for evaluation of work assignment performance are described for each of the following performance criteria: technical quality; compliance with schedule; compliance with budget; management; and editorial quality. Measures for each of these criteria are discussed and agreed upon by the RPO and the Kearney Team WAM during the assignment planning process. To the extent possible, clear, quantitative measures will be established.



EPA Contract No. 68-W9-0040  
Work Assignment No. R02-01-07  
GMC Fisher Guide Division  
Revised SV Work Plan and SV Report

Work Plan Revision No. 1  
November 29, 1989

ATTACHMENT I

STAFF RESPONSIBILITY CHART

<u>STAFF</u>	<u>ROLE</u>	<u>AREAS OF RESPONSIBILITY</u>
G. Dixon	Technical Director	Management oversight
S. Williamson	Technical Assistant to the Technical Director; Editorial Staff	Administrative support, such as: perform COI checks, assemble and edit work plans, project tracking, general completeness review of deliverables, and distribute documents; editorial review of final deliverables
J. Atlas	Regional Liaison	Initiate work, monitor project planning and implementation, and conduct project performance evaluation
D. LaRusso	Quality Control Reviewer	Senior-level technical review of final deliverables
S. Heikkila	Kearney Team Work Assignment Manager	Day-to-day management
A. Luebeck	Technical Staff	Preparation of revised SVWP and final SV report
B. Hendricks	Technical Staff	Preparation of revised SVWP and final SV report
W. Rohrer	Technical Staff	Preparation of work plan

EPA Contract No. 68-W9-0040  
 Work Assignment No. R02-01-07  
 GMC Fisher Guide Division  
 Revised SV Work Plan and SV Report

Work Plan Revision No. 1  
 November 29, 1989

## ATTACHMENT II

### STAFFING

Staff			Task					
Name	Firm <sup>1/</sup>	Labor <sup>2/</sup> Category	01	02	03	98 <sup>3/</sup>	99 <sup>4/</sup>	Total
<u>Technical Director</u>								
G. Dixon	ATK(KC)	P4	10	-	-	-	14	24
<u>Work Assign- ment Manager</u>								
S. Heikkila	DPRA	P3	10	-	-	-	16	26
<u>Staffing</u>								
J. Atlas	ATK	P4	8	-	-	-	4	12
S. Williamson	ATK(KC)	T2	12	4	4	-	16	36
W. Rohrer	DPRA	P4	3	-	-	-	-	3
A. Luebeck	DPRA	P2	-	12	30	-	-	42
B. Hendricks	DPRA	P2	-	12	30	-	-	42
Tech Support	DPRA		-	10	12	-	-	22
<u>Quality Control</u>								
D. LaRusso	ATK(KC)	P4	-	-	-	20	-	20
Tech Support	ATK(KC)		-	-	-	8	-	8
Totals			43	38	76	28	50	235

<sup>1/</sup> ATK = A.T. Kearney, Inc.  
 ATK(KC) = Kearney/Centaur, a Division of A.T. Kearney, Inc.  
 DPRA = DPRA Incorporated

<sup>2/</sup> Provides Labor Classification for Each Staff Person (e.g., P4, P3)

<sup>3/</sup> Task 98 = Quality Control

<sup>4/</sup> Task 99 = Project Management

EPA Contract No. 68-W9-0040  
Work Assignment No. R02-01-07  
GMC Fisher Guide Division  
Revised SV Work Plan and SV Report

Work Plan Revision No. 1  
November 29, 1989

ATTACHMENT III

SCHEDULE

<u>Task</u>	<u>Milestone #</u>	<u>Description</u>	<u>Scheduled Date</u>
01	01	Prepare work plan	10/16/89
		Work plan revision 1	11/29/89
02	02	Submit revised SVWP to QC for review	10/19/89
02	03	Submit QC comments on SVWP to KWAM	10/25/89
02	04	Submit revised SVWP to Technical Director	10/30/89
02	05	Submit revised SVWP to EPA	11/03/89 ✓
03	06	Submit final SV report to QC for comment	Contingent upon receipt of analytical results
03	07	Submit QC comments on final SV report to KWAM	TBD*
03	08	Submit final SV report to Technical Director	TBD*
03	09	Submit final SV report to EPA	TBD* ✓
99	10	Project management	In accordance with above milestones

\*TBD = To be determined

EPA Contract No. 68-W9-0040  
Work Assignment No. R02-01-07  
GMC Fisher Guide Division  
Revised SV Work Plan and SV Report

Work Plan Revision No. 1  
November 29, 1989

ATTACHMENT IV

ESTIMATED COST

<u>A.T. Kearney, Inc.</u>	<u>Hours</u>	<u>Cost</u>
Labor	100	\$ 4,336
Other Direct Costs		
Supplies (paper, pens, file folders, etc.)	<u>78</u>	
Office Support Labor	<u>52</u>	
Photocopy	<u>78</u>	
Postage/Delivery	<u>129</u>	
Telephone/FAX	<u>102</u>	
Misc. Expense (computer leases, off-site file storage, subcontract administration, etc.)	<u>78</u>	
Total ODC Costs		\$ <u>517</u>
Subtotal		\$ 4,853
<u>DPRA Incorporated</u>		
Labor	135	\$ 5,041
Fee		\$ 353
Other Direct Costs		
Photocopy	<u>60</u>	
Postage/Delivery	<u>60</u>	
Telephone/FAX	<u>60</u>	
Misc. Expense	<u>60</u>	
Total ODC Costs		\$ <u>240</u>
Subtotal		\$ 5,634
SUBTOTAL		\$10,487

EPA Contract No. 68-W9-0040  
Work Assignment No. R02-01-07  
GMC Fisher Guide Division  
Revised SV Work Plan and SV Report

Work Plan Revision No. 1  
November 29, 1989

ATTACHMENT IV (Cont'd)

ESTIMATED COST

	<u>Hours</u>	<u>Cost</u>
<u>A.T. Kearney, Inc.</u>		
Fee - 3% Base		\$ 315
- 3% Award		<u>315</u>
Subtotal		\$ 630
TOTAL ESTIMATED COST	<u>235</u>	<u>\$11,117</u>

AVERAGE LABOR COST	
PER HOUR FOR ALL FIRMS	\$39.90
WORK PLAN AVERAGE HOURLY RATE	\$47.31

Kearney/Centaur Division  
A.T. Kearney, Inc.  
P.O. Box 1438  
225 Reinekers Lane  
Alexandria, Virginia 22313  
703 683 7932

Management  
Consultants

ENVIRONMENTAL PROTECTION  
AGENCY REGION II

89 NOV -6 AM 9:51

HAZARDOUS WASTE  
PROGRAMS BRANCH

**ATKEARNEY**

November 3, 1989

CAS9-11/03/89

Mr. Ben Singh  
Regional Project Officer  
U.S. Environmental Protection Agency  
Region II  
26 Federal Plaza, Room 907  
New York, New York 10278

Reference: EPA Contract No. 68-W9-0040; Work Assignment No. R02-01-07; General Motors Corporation, Fisher Guide Division, Syracuse, New York; EPA ID No. NYD002239440; Sampling and Analysis Plan

Dear Mr. Singh:

Attached is the revised Sampling and Analysis Plan (S/A) for General Motors Corporation, Fisher Guide Division (GMC). All EPA Region II comments, dated August 24, 1989, were addressed and incorporated into this revised S/A. The S/A also includes the revisions discussed in the RFA cover letter to you dated March 24, 1989.

In addition the S/A has been revised to reflect that GMC will be conducting the sampling and that GMC will have the laboratory analyses conducted by a New York State Department of Environmental Conservation-certified laboratory.

Please note that the Health and Safety Plan has been deleted in the revised S/A because it will be GMC's responsibility to ensure the health and safety of their sampling personnel.

If you have any questions or comments, please feel free to call me or Steve Heikkila, the Kearney Team Work Assignment Manager (who can be reached at 612-227-6500).

Sincerely,

*George P. Dixon*

George P. Dixon  
Technical Director

cc: L. Negron, EPA Region II  
A. Glazer  
L. Poe  
J. Atlas  
D. LaRusso  
W. Rohrer, DPRA



SAMPLING AND ANALYSIS PLAN

General Motors Corporation  
Fisher Guide Division  
Syracuse, New York  
EPA I.D. No. NYD002239440

Submitted by:

Kearney/Centaur Division  
A.T. Kearney, Inc.  
225 Reinekers Lane  
Alexandria, Virginia 22313

Submitted to:

Mr. Ben Singh  
Regional Project Officer  
U. S. Environmental Protection Agency  
Region II  
26 Federal Plaza, Room 907  
New York, New York 10278

EPA Contract No. 68-W9-0040  
Work Assignment No. R02-01-07

November 1989

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## 1.0 INTRODUCTION

This Sampling and Analysis Plan (S/A) details the procedures and rationale for soil and waste sampling at General Motors Corporation, Fisher Guide Division (GMC), Syracuse, New York. A Visual Site Inspection (VSI) of this facility was conducted on January 18-19, 1989, and resulted in a recommendation for sampling of soils at four Solid Waste Management Units (SWMUs) and one Area of Concern (AOC) and sampling of oil-stained crushed rock at one AOC.

The purpose of the sampling is to gather preliminary analytical data to fill data gaps that remain after completion of the VSI. The results from the sampling visit will be used to determine:

- a) whether a release has occurred from the SWMU or AOC being sampled; and/or
- b) whether any further action should be suggested.

GMC will be responsible for collecting all samples in accordance with this Sampling and Analysis Plan. Any deviations from this plan must be approved by EPA Region II or by the New York State Department of Environmental Conservation (NYSDEC) personnel present during sampling and must be documented in a field log.

GMC will retain an approved laboratory to perform the analyses. Laboratory analysis will be completed by a laboratory certified by the NYSDEC. The samples shall be validated by EPA Region II or NYSDEC personnel.

This Sampling and Analysis Plan includes the following major sections:

- o Sampling Parameters and Rationale
- o Field and Lab QA/QC
- o Sample Handling

- o Sampling Procedures

## 2.0 SAMPLING PARAMETERS AND RATIONALE

This section specifies the criteria to be used for the sampling. These criteria include: (1) sampling points and (2) analytical requirements. The sampling points are defined by the SWMU or AOC name and number and the sequence in which the SWMUs are to be sampled. The analytical requirements are described by the order of sample collection, the analytical parameters, the container type and size for each parameter, and the preservation method.

### 2.1 Identification of Sampling Points

Sampling will be conducted at the following SWMUs and AOCs:

- o Drum Storage Area No. 2 (SWMU 4) and Filter Press Sump (SWMU 64)
- o Sludge Sump (SWMU 34)
- o Equalization Tank 1 (SWMU 44)
- o Oil Stains Near the Wet Well (AOC C)
- o Oil Stains Near the Industrial Waste Sump (AOC B)

Four soil samples will be collected on the south side of Drum Storage Area No. 2 (SWMU 4) and the Filter Press Sump (SWMU 64). Drum Storage Area No. 2 was used from 1964 to 1981 for the storage of 1,1,1-trichloroethane, trichloroethylene, paint solvents, and grease. During the VSI, oil stains were observed on the south side of the storage pad, adjacent to a sump located within the pad. The Filter Press Sump was used from 1964 to 1981 to collect any spills from Drum Storage Area No. 2. This sump was reactivated in 1985 to collect filter press effluent.

One soil sample will be collected from the west side of the Sludge Sump (SWMU 34). During the VSI, staining from apparent spillage was observed in this area.

One soil sample will be collected on the east side of Equalization Tank 1 (SWMU 44). During the VSI, oil staining was observed in this area. The oil apparently dripped from the rope skimmer used to remove oil from the tank.

One soil sample will be collected at the Oil Stains Near the Wet Well (AOC C). During the VSI, oil stains were observed in this area. The oil stain is approximately two feet wide and ten feet long. The stain appears to have resulted from leakage in adjacent piping.

One sample of crushed rock at the Oil Stains Near the Industrial Waste Sump (AOC B) will be collected. During the VSI, oil staining was observed in this area, beneath the opening of a clay pipe which emerges from an embankment on the north side of the Industrial Waste Sump. The source of the oil is not clear.

Sampling points must be chosen at locations where visual observation indicates spillage has occurred. In addition to the environmental samples, the field team will submit the following quality control samples:

- o Two background soil samples will be collected. The tentative location of the background samples is the southeastern corner of the GMC Fisher Guide property, east of the parking lot. The suitability of the background soil locations will be verified by EPA Region II or NYSDEC personnel during the sampling visit and new locations will be chosen at that time if necessary.

In addition, the following quality control samples must be collected to verify analytical results:

- o One duplicate soil sample to be collected from AOC C; and
- o One set of equipment blanks (rinsate from equipment decontamination).

The sampling locations are shown in Figures 1 and 2.

FIGURE 1. SAMPLING LOCATIONS

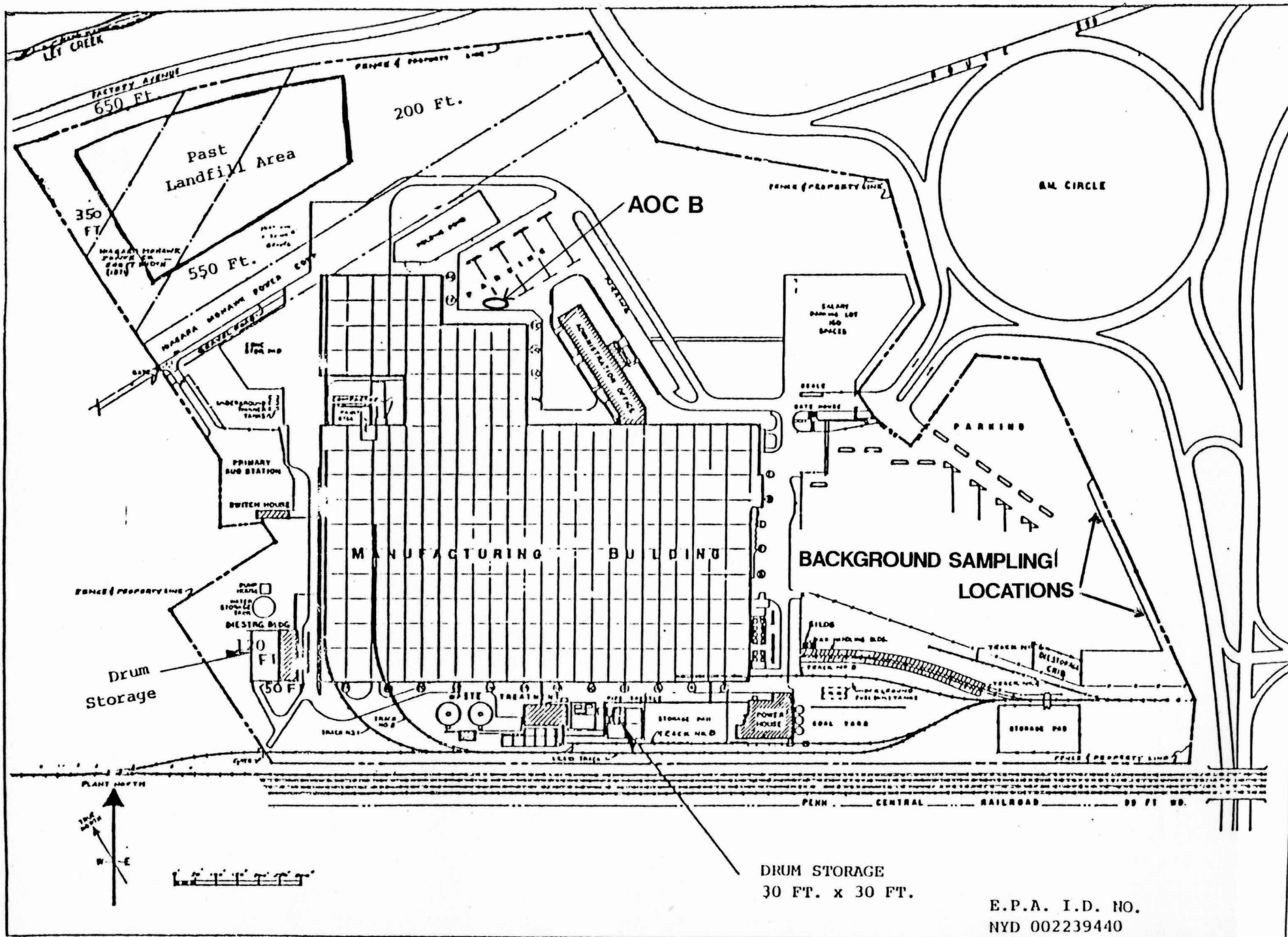
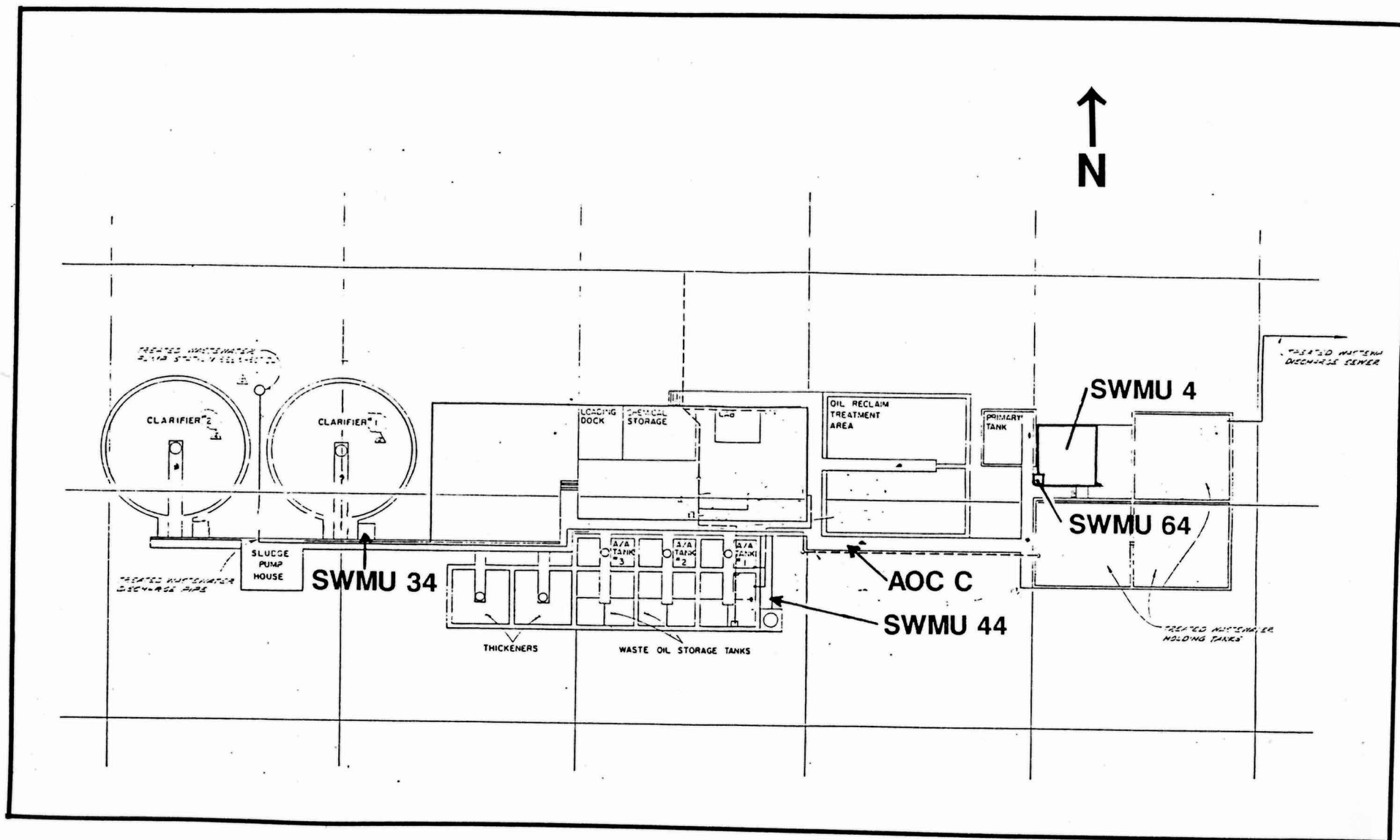




FIGURE 2. SAMPLING LOCATIONS - WASTEWATER TREATMENT PLANT



To reduce the potential for cross-contamination during sampling, sampling will proceed from points of expected least contamination to points of expected highest contamination. The sampling order in Table 1 is listed in order of increasing likelihood of detecting a release from a SWMU or AOC. Table 1 also identifies the sampling medium, depth, method/type, and the analysis parameters for each sample location.

## 2.2 Analytical Requirements

Samples from each sampling area must be containerized and preserved according to the Sample Collection Checklist (Table 2).

## 3.0 FIELD AND LAB QA/QC

The reliability of the data generated from the sampling depends on the quality of the samples collected, the accuracy and completeness of the documentation and recordkeeping, and the validity and reproducibility of the analytical methods. Background samples must be collected for comparison to analysis of other samples. An equipment blank is required to verify that contamination has not been introduced from sampling equipment. A duplicate is required to verify laboratory analysis. In order to ensure reliable results, the following standard procedures will be used.

### 3.1 Equipment and Container Decontamination

All equipment to be used on site must be decontaminated prior to the sampling visit and must be packaged to effectively protect it from contamination during transit to and on the site. Dedicated stainless-steel trowels, ice pick heads, mixing bowls, and spoons are recommended for soil sampling in order to eliminate the need for decontamination between sampling points and additional equipment blanks and to prevent cross-contamination of samples. In order to confine any possible release of hazardous agents to the smallest area, the area immediately surrounding the sampling point (within approximately a 10-foot radius) must be the designated "exclusion zone" (EZ). All sampling activities must be confined to the EZ. Immediately

Table 1

## SAMPLING LOCATIONS AND ANALYSIS PARAMETERS

GMC Fisher Guide  
Syracuse, New York

Sample No.	Location	Sampling Medium	Depth	Method/ Type*	Analysis Parameters
1	Equipment Blank (trowels, ice pick heads, mixing bowls, spoons)	Water	--	Discrete	Volatile organics, Semi-volatile organics, PCBs, Inorganics
2	Background	Soil	Surface to 6 inches	Spoon/Grab	Volatile organics, Semi-volatile organics, PCBs, Inorganics
3	Background	Soil	Surface to 6 inches	Spoon/Grab	Volatile organics, Semi-volatile organics, PCBs, Inorganics
4,5,6,7	Drum Storage Area No. 2 (SWMU 4) and Filter Press Sump (SWMU 64)	Soil	Surface to 12 inches	Spoon/Grab	Volatile organics, Semi-volatile organics, PCBs, Inorganics,

\* Each sample will be collected using a stainless steel spoon. Samples for semi-volatile organics, PCBs, and inorganic analysis will be homogenized in a stainless steel bowl using a stainless steel spoon.

Table 1 (Continued)

## SAMPLING LOCATIONS AND ANALYSIS PARAMETERS

GMC Fisher Guide  
Syracuse, New York

Sample No.	Location	Sampling Medium	Depth	Method/ Type*	Analysis Parameters
8	Equalization Tank 1 (SWMU 44)	Soil	Surface to 6 inches	Spoon/Grab	Volatile organics, Semi-volatile organics, PCBs, Inorganics
9,10	Oil Stains Near the Wet Well (AOC C) (duplicate)	Soil	Surface to 6 inches	Spoon/Grab	Volatile organics, Semi-volatile, organics, PCBs, Inorganics
11	Oil Stains Near the Industrial Waste Sump (AOC B)	Soil	Surface to 6 inches	Spoon/Grab	Volatile organics, Semi-volatile, organics, PCBs, Inorganics
12	Sludge Sump (SWMU 34)	Soil	Surface to 6 inches	Spoon/Grab	Volatile organics, Semi-volatile, organics, PCBs, Inorganics

\* Each sample will be collected using a stainless steel spoon. Samples for semi-volatile organics, PCBs, and inorganic analysis will be homogenized in a stainless steel bowl using a stainless steel spoon.

Table 2

## SAMPLE COLLECTION CHECKLIST

## Water Sample (Equipment Blank)

Parameter	Container <sup>1</sup>	Preservative	Holding Time
Semi-Volatiles/PCBs	4 1-liter amber glass bottles	4°C	5 days until extraction 40 days until analysis
Volatiles	2 40-ml glass vials	4°C <sup>2</sup>	10 days
Metals	1 1-liter polyethylene bottle	HNO <sub>3</sub> ; pH < 2	6 months (Hg 26 days)

## Soil and Crushed Rock Samples

Parameter	Container <sup>1</sup>	Preservative	Holding time
Semi-Volatiles/PCBs	1 8-oz. wide mouth glass bottle	4°C	10 days until extraction 40 days until analysis
Volatiles	2 120-ml glass vials	4°C	10 days
Metals	1 8-oz. wide mouth glass jar		6 months

<sup>1</sup> All containers must be supplied with teflon-lined plastic caps.

<sup>2</sup> The pH of the sample must be adjusted to <2 by carefully adding 1:1 HCl drop by drop to the required two (40-ml) VOA sample vials. The number of drops of 1:1 HCl required must be determined on a third portion of sample water of equal volume. If acidification of the sample causes effervescence, the sample must be submitted without preservation except for cooling to 4 degrees C. This sample property must be appropriately noted when present. The 1:1 HCl solution must be made up with demonstrated analyte-free deionized water.

outside the EZ must be a designated "contamination reduction zone" (CRZ) that will contain equipment for decontamination of personnel, sampling equipment, and safety equipment. The following procedure must be used to decontaminate sampling devices and field testing equipment prior to each use and, if necessary, to decontaminate the outer surface of containers of collected samples:

1. wash and scrub with low-phosphate detergent;
2. tap water rinse;
3. rinse with 10%  $\text{HNO}_3$  ultrapure;
4. tap water rinse;
5. an acetone-only rinse or a methanol followed by hexane rinse (solvents must be pesticide grade or better);
6. deionized demonstrated analyte-free water rinse;
7. air dry; and
8. wrap in stainless steel, shiny side out, for transport.

Tap water from a municipal water treatment system will be used. Untreated potable water will not be used.

### 3.2 Waste Disposal

Disposal of any waste generated during the sampling will be GMC's responsibility. The facility must use a suitable container in which to collect any liquid waste generated during the sampling. Non-disposable items such as clothing must be effectively contained and decontaminated.

### 3.3 Equipment Blanks and Duplicates

In order to verify that sampling techniques and procedures result in quality samples, an equipment blank and a duplicate will be analyzed.



The equipment blank is used to determine whether decontamination procedures have been effective in removing all contaminant residues from the sampling devices. The equipment blank must be prepared by the field team with deionized analyte-free water run over each sampling trowel and ice pick prior to sampling. The deionized analyte-free water must be transferred directly into sample containers.

The duplicate soil sample is used to evaluate the precision of the analytical methods.

The laboratory will provide spike recovery data on all samples to measure the accuracy of the analytical instruments.

#### 4.0 SAMPLE HANDLING

Proper handling of samples is essential to protect the analytical integrity of the samples, to definitively identify and track the samples, to comply with chain-of-custody requirements, and to secure the samples from damage or tampering. All samples must be shipped to the analytical laboratory via an overnight delivery service within 24 hours of collection.

##### 4.1 Containers and Preservatives

Table 2 describes the container type and size. Preservation methods are limited to pH control, refrigeration, and the addition of chemical stabilizers. The pH of samples receiving pH preservation must be tested with pH paper. The containers and necessary preservatives will be obtained by GMC prior to sampling.

##### 4.2 Sample Identification

To ensure proper identification and tracking of samples, each sample collected must be clearly and precisely marked, and the tag must be securely attached to the sample. The sampling location will be documented and the sample description and identification will be cross-referenced in the field logbook. Photographs and written descriptions of each

sampling point must be recorded for verification.

#### 4.3 Chain-of-Custody Documentation

A chain-of-custody record must be completed and must accompany each shipment of samples transported for laboratory analysis. A copy of this document must be retained by the field sampling team. The chain-of-custody record must be placed in a waterproof bag and taped to the underside of the lid of the ice chest being used for transport. The field sampling team must request an updated, signed copy of the chain-of-custody document upon delivery of samples to the receiving lab. An example of a chain-of-custody form is shown in Figure 3.

### 5.0 SAMPLING PROCEDURES

Sampling activities involve three general tasks:

1. Establishing the site safety parameters and defining the boundaries of the work zones.
2. Sample collection and decontamination procedures to ensure analytical integrity of the sample.
3. Sample documentation and shipment.

#### 5.1 Site Safety Considerations

GMC is responsible for the preparation and implementation of a site health and safety plan in accordance with current NIOSH and OSHA standards.

The area surrounding each sampling point must be inspected and all pertinent observations must be recorded, including any environmental factors which may affect the sampling process. Prior to and during sampling, all measurements must be recorded in a field logbook.

**FIGURE 3**

### CHAIN OF CUSTODY RECORD

[illegible]

## 5.2 Sampling Requirements

The following lists itemize the minimum anticipated requirements for field equipment and supplies. GMC must make arrangements to ensure that all necessary equipment and supplies are available at the site.

### Field Equipment

Air monitoring equipment (e.g., OVA, photoionization detector)

Stainless steel trowels

Stainless steel pans

Stainless steel ice picks (if ground is frozen)

### Field Supplies

Sample containers and preservatives as required by Table 2

Sample tags

Chain-of-custody forms

Lab forms

Clear plastic sheeting (4-mil)

Disposable plastic gloves

pH paper

Decontamination solvents as described in Section 3.1

Reagent-grade deionized water

Non-phosphate detergent

5-gallon plastic buckets

Polyethylene wash bottles (500 ml)

Bottle brushes, long handled

Paper towels

Trash bags (plastic)

Tap water (for equipment washing)

Plastic basins or tubs

Zip-loc bags (large)

Water-proof tape  
Water-proof markers  
Ice  
Ice chests  
Stakes  
Boundary tape  
First aid kit  
Emergency eyewash  
Suitable liquid waste container(s) per Section 3.2

### 5.3 Sample Collection

The Sample Collection Checklist given in Table 2 must be used as a guide to the sampling process. Samples must be collected in the order shown in Table 1 using the container and parameter specified in Table 2. Snow and surface vegetation must be scraped from the ground surface. If the trowels cannot penetrate frozen soils, a stainless steel ice pick must be used to break up the soil. Dedicated trowels, ice pick heads, and mixing pans are recommended in order to eliminate the need for decontamination between sampling points and for additional equipment blanks. All samples should be collected in a manner so as to prevent cross-contamination of samples.

The following procedure must be used to collect samples:

1. The volatile organic sample must be collected first, using a dedicated stainless steel trowel. Any rocks, twigs, leaves, or other debris must be removed and the sample must then be placed directly into the VOA vials from the trowel. The container must be filled completely, leaving no headspace.
2. After collection of the volatile organic sample, additional soil (or gravel) must be collected and placed in a dedicated stainless steel mixing pan. Any rocks, twigs, leaves, or other debris must be removed. The soil must then be homogenized and placed in the sample jars, beginning with the semi-volatile sample. The containers must be filled completely, leaving no headspace.
3. The soil samples must be collected so that there is a minimum of void space in the containers.

4. The exterior of the sample container must be decontaminated when necessary prior to further handling.
5. A dedicated trowel and mixing pan is recommended at each sampling point, eliminating the need for decontamination between sampling points.
6. Samplers must put on a new pair of disposable plastic gloves at each sampling point.
7. The sample label must be clearly and precisely completed and attached to each sample as it is collected. At a minimum, the sample label must include the following: collection time and date, sample identification number and name of location, sampler signature, type of analysis, and preservative added.
8. The chain-of-custody record, lab forms, and field logbook notations must be completed. The field logbook must include a detailed description of the conditions at each sampling location and details regarding each sample collection including the collection date/time, preservation method used, a soil characterization, the OVA or photoionization detector reading, the samples collected and the order in which the sample jars are filled, the homogenization method, and any other pertinent data. The logbook also must include a description of the precise location of each sampling point.



Aug 1 '89

CA 89-08/01/89

Paul R. Counterman, P.E.  
Director  
Bureau of Hazardous Waste Facility Permitting  
Division of Hazardous Substances Regulation  
New York State Department of  
Environmental Conservation  
50 Wolf Road  
Albany, NY 12233-0001

Re: RCRA Facility Assessment (RFA), Sample Visit Workplan (SVWP)  
for: Envirotek, LTD, EPA I.D. Number: NYD 038641606  
GMC Fisher Guide, EPA I.D. Number: NYD 002239440

Dear Mr. Counterman:

Enclosed are copies of the referenced SVWP which have been prepared by an EPA Contractor. Please be advise that these SVWPs were sent to you for review at the end of February 89, along with the SVWP for GMC Harrison Radiator. Comments on GMC Harison SVWP from Mr. Ravi Pilar of the Western Civil Technology Section were received in March 27, 1989. We would like to have your staff review these workplans and submit comments to this office no later than September 13, 1989.

If you have any questions regarding this matter, please call Luis Negrón, of my staff, at (212) 264-0994.

Sincerely yours,

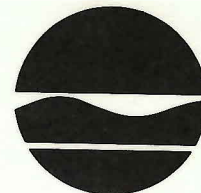
Frank A. Langone, Chief  
New York Facilities Section  
Hazardous Waste Facilities Branch

Enclosure

cc: S. Kaminski, NYSDEC, Albany, w/o encl.  
L. Stephenson, NYSDEC, Albany, w/encl.

bcc: L. Negrón, 2AWM-HWF, w/o encl. ✓  
F. Langone, 2AWM-HWF, w/o encl. ✓  
A. Bellina, 2AWM-HWF, w/o encl.

New York State Department of Environmental Conservation  
50 Wolf Road, Albany, New York 12233



Thomas C. Jorling  
Commissioner

JUN 14 REC'D 89

CA 89-06/14/89

Mr. Marwan Fanek  
New York Facilities Section, Room 1043  
U.S. Environmental Protection Agency  
Region II  
26 Federal Plaza  
New York, NY 10278

Dear Mr. Fanek:

Re: GM Fisher Guide RFA/SV  
EPA I.D. No. NYD002239440

This Department has reviewed and prepared comments for the above referenced workplan.

The two main problems with the workplan are its lack of QA/QC procedures and its lack of any explanation of why some SWMUs were selected for further study and others were not. Part of the reason for the latter problem may have been the workplans authors confusion in tracking the SWMUs. A March 16, 1989 letter from this Department to EPA described tracking problems encountered in the RFA/PR and RFA/VSI, but a response from the author, A.T. Kearney Inc., was never received. Attached is a detailed list of comments on the workplan and a copy of the QAPjP guidance.

If you have any questions, please contact Mr. Paul Patel, of my staff, at (518) 457-9696.

Sincerely,

*Steve Kaminski for PRC*

Paul R. Counterman, P.E.  
Director  
Bureau of Hazardous Waste Facility  
Management  
Division of Hazardous Substances  
Regulation

Attachment

cc: P. Patel

MAY 23 1989

RFA Work Assignments Under New Contract: GMC-Harrison,  
GMC-Fisher, Envirotek

CA 89-05/23/89

Andrew Bellina, Chief  
Hazardous Waste Facilities Branch (2AWM-HWF)

Stanley Siegel, Chief  
Hazardous Waste Program Branch (2AWM-HWF)

The above referenced projects were scheduled for completed RCRA Facility Assessments (RFA) under the old Implementation Contract by April 1, 1989. While work had advanced in each of these projects, the RFA's could not be completed by that date.

In the case of GMC-Harrison, a Visual Site Inspection (VSI) was conducted which identified several previously unidentified SWMUs. As a result, the already completed Preliminary Review (PR) must be revised according to GMC's revised SWMU questionnaire before a Sampling Visit can be done.

Draft Sampling Visit Workplans (SVWP) were developed for GMC-Fisher and Envirotek. They were submitted to ESD for review. ESD had several comments on the draft workplans. These deficiencies must be resolved before sampling can commence.

Completion of these corrective action projects is a high priority for HWFB. Since A.T. Kearney, Inc. did the work on these three projects under the old contract and has now been awarded the new contract, I am requesting that Kearney be directed to complete these projects now. Please take action on this matter as soon as possible and advise me or staff as to when my staff can plan to schedule the completion of this work.

I appreciate your cooperation in this matter. If you or your staff have any questions, please contact Luis Negron of my staff at (212) 264-0994

cc: Ben Singh, HWPB

bcc: L. Negron, HWFB  
F. Langron, HWFB ✓

( F. LANGONE, Chief )

2AWM/HWF:LNEGRON:SVWP.MEM:mm



**New York State Department of Environmental Conservation**  
50 Wolf Road, Albany, New York 12233

ENVIRONMENTAL PROTECTION  
AGENCY RO II

89 MAY -1 AM 11:37

HAZARDOUS WASTE  
COMPLIANCES BR.

APR 26 1989



Thomas C. Jorling  
Commissioner

Mr. Richard J. Larkin  
Manager, Manufacturing Engineering  
Fisher Guide Division of GMC  
1000 Town Line Road  
Syracuse, NY 13221-4869

CA 89- 04/24/89

Dear Mr. Larkin:

Re: 1988 Annual Report  
NYD002239440

The New York State Department of Environmental Conservation has received GMC Fisher's 1988 Annual Report dated March 31, 1989.

Preliminary review of the groundwater portion of the report indicates that it fulfills the requirements of 6NYCRR 373-3.6(e)(2).

Should any problems arise, Ms. Luanne F. Whitbeck, of my staff, will contact you.

Sincerely,

Paul R. Counterterm, P.E.  
Director  
Bureau of Hazardous Waste Facility  
Permitting  
Division of Hazardous Substances  
Regulation

cc: L. Whitbeck  
L. Gross, Region 7  
E. Miles  
J. Desai  
G. Meyer, USEPA Region II

file NYD002 239 440

1989 MAY 11 PM 1:41

PERMITS ADMINISTRATION  
BRANCH

ENVIRONMENTAL PROTECTION AGENCY  
REGION II - HAZARDOUS WASTE COMPLIANCE BRANCH  
NEW YORK COMPLIANCE SECTION

DATE 5/16/89

( ) CONRAD SIMON	( ) DIT FAI CHEUNG
( ) SHELLEY HOLM	( ) MARGARET EMILE
( ) GEORGE MEYER	( ) PHIL FLAX
( ) ANDREW BELLINA	( ) TED GABEL
( ) STANLEY SIEGEL	( ) PAUL INGRISANO
( ) WILKIE SAWYER	( ) PEGGY MCGRATH
( ) FRANK LANGONE	( ) RAY SLIZYS
( ) JOEL GOLUMBEK	( ) GWENDOLYN SZABO
( ) _____	( ) _____

REMARKS

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- ( ) Action - Comments/Response due by \_\_\_\_\_  
( ) Circulate  
( ) Direct Reply  
( ) Return to \_\_\_\_\_  
( ) FYI  
( ) CS's Signature  
( ) GM's Signature  
( ) See me to discuss by \_\_\_\_\_  
( ) Copy/Route to PAG

Thanks

JG  
John Gorman, Chief  
New York Facilities Section